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# THE LATEST SCOOP

1988 ◆ EDITION

The International Ice Cream Association (IICA) launched its ICE CREAM FOR AMERICA promotion in 1983 to increase consumer awareness and consumption of ice cream. Since that time, the industry has experienced unprecedented growth. ICE CREAM FOR AMERICA has sparked the imagination of ice cream companies across the country to carry out summer-long ice cream promotions. ICE CREAM FOR AMERICA serves as an industry-wide umbrella program for promoting the benefits of ice cream and consists of three integral parts: a nationwide public and trade relations program conducted by IICA throughout the summer; branded marketing and promotional activities conducted by IICA members; and an extensive national advertising effort initiated by the National Dairy Board.

In 1988, IICA cooperated with the National Dairy Promotion and Research Board in the planning, development and implementation of the most extensive national advertising campaign for ice cream to date. Member companies of the IICA greatly increased their branded advertising expenditures to over $120 million and the National Dairy Board dedicated $6.7 million to a nonbranded advertising program developed around the theme "ICE CREAM the treat that treats you good." Also, IICA worked cooperatively with Donnelley Marketing in a direct mail test market of a Carol Wright Ice Cream Recipe Book to 5.3 million homes.

The month of July has been designated as National Ice Cream Month by the United States Congress and by presidential proclamation. The second Sunday in July is National Ice Cream Day.

The sixth annual ICE CREAM FOR AMERICA was kicked off with a Capitol Hill Ice Cream Party on June 23, 1988 in Washington, D.C. More than 10,000 ice cream lovers, including Senators, and Congressmen and their families, Congressional staffs, IICA members, government officials and national and local media attended the kickoff. They enjoyed 2,500 gallons of ice cream, 15,000 novelties, 180 gallons of Smucker's Toppings, and 8,000 A&W Rootbeer Floats.

# THE LATEST SCOOP

WORLDWIDE

FACTS & FIGURES ON ICE CREAM
& RELATED PRODUCTS

Published by

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# FOREWORD



Ice cream, with its universal appeal to all age groups, continues to grow in popularity. Record high volumes of ice cream and related products were consumed in 1987.

"The Latest Scoop" reports the trends taking place in the industry and contains information on production and consumption in the United States, Canada and 54 other countries, as well as economic data and other relevant information.

The International Ice Cream Association is the trade association for manufacturers and distributors of ice cream and other frozen dessert products. The Association's activities range from legislative and regulatory advocacy to market research and industry training and education. Its 210 member companies produce an estimated 85 percent of ice cream and related products consumed in the United States and Canada.

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## How It All Started

Ice cream probably evolved from chilled wines and other iced beverages. In the fourth century before Christ, Alexander the Great was reputed to be fond of iced beverages.

And, from ancient records, it is learned that in 62 A.D., the Roman Emperor, Nero, sent fleets of slaves to the mountains of the Apennines to fetch snow and ice which were then flavored with nectar, fruit pulp and honey.

Marco Polo, the 13th century bard and adventurer, brought with him to Europe from the Far East, recipes for water ices...said to be used in Asia for thousands of years. These water ices became popular in Venice and throughout Italy.

When Catherine de Medici married Henry II and became Queen of France in 1533, she brought with her recipes for Italian sherbet. It is said that her son, Henry III, was addicted to these delicacies and consumed them daily.

In 1660 the Cafe Procope was founded in Paris by an Italian named Coltelli, and water ices and possibly cream ices were manufactured and dispensed.

This delicacy found its way to America and in 1700 Governor Bladen of Maryland was serving ice cream to his guests.

Dolley Madison created a sensation when she served ice cream as a dessert in the White House at the second inaugural ball in 1812.

The first hand-cranked freezer was invented by Nancy Johnson in 1846. She failed to patent it, however, and a similar type was patented by a Mr. Young in 1848.

The first commercial ice cream plant was established in Baltimore in 1851 by Jacob Fussell.

A year before the turn of the century, August Gaulin of Paris invented the homogenizer which is used to help develop the smooth texture of ice cream.

With the coming of mechanical refrigeration, the first batch freezer was invented by H. H. Miller of Canton, Ohio. About 1926, the first continuous freezer was commercially perfected by Clarence Vogt of Louisville, Kentucky.

Italo Marchiony, who emigrated from Italy in the late 1800s, produced the first ice cream cone in 1896 in New York City. He was granted a patent for his special mould in December 1903. In 1904, the ice cream cone was introduced at the St. Louis World's Fair when a Syrian waffle concessionaire named E. A. Hamwi started rolling waffles into the shape of a cone for the benefit of an ice cream vendor who occupied an adjoining booth. It has remained a favorite to this date, with billions of cones consumed each year. Other products, such as ice cream on sticks, ice cream bars and other forms of ice cream, ice milk and sherbet, known in the industry as "novelties" had their beginning in the 1920s.

## How Ice Cream Is Made

The basic mix for the manufacture of ice cream is largely cream and other milk ingredients, plus sweeteners.

The ingredients of the mix are carefully blended in proper proportions in a mixing tank. The mix may contain small amounts of functional ingredients, such as stabilizer, which prevents the formation of ice crystals in the ice cream after it is frozen.

The mix goes to a pasteurizer where it is heated and held at a predetermined temperature for a specified period of time. The most common type of pasteurization is the high-temperature-short-time method in which the mix is heated to 175 degrees F. and held for 25 seconds.

The hot mix then goes to the homogenizer where, under pressure of from 2,000 to 2,500 pounds per square inch, the milkfat globules are broken into still smaller particles to help make the ice cream smooth.

After homogenization, the hot mix is quickly cooled to a temperature of about 40 degrees F.

Next, freezing of the mix is accomplished by one of two methods: a "continuous freezer" which uses a steady flow of mix; or a "batch freezer" which makes a single quantity of ice cream at a time.

While the ice cream is being frozen, blades in the freezer, or "dashers" as they are commonly called, whip and aerate the products. Without this aeration, the finished product would be an inedible, solidly frozen mass of cream, milk, sugar and flavoring. In all states, this aeration, called "overrun," is controlled by requiring the finished ice cream shall weigh not less than 4.5 pounds per gallon and contain at least 1.6 pounds of total food solids.

With the use of the continuous freezer, ingredients such as fruits and nuts are added after the freezing by a mechanical flavor feeder. Liquid flavors are added to the mix prior to freezing.

The filling operation includes many activities such as filling large containers, half gallon, quart and pint packages, paper cups or molds for ice cream on a stick.

After the freezer and filling, ice cream goes to the "hardening room" where sub-zero temperatures further harden the ice cream. From the hardening room, it is loaded into refrigerated trucks for delivery to distributors or retailers.

# Review

## United States

- For the eighth consecutive year, the production of ice cream and related products reached record high volumes, peaking at 1.4 billion gallons in 1987, up 2% from a year ago. Ice cream production reached a record 931.4 million gallons in 1987, up 1% and ice milk reported a record high volume for the fifth consecutive year increasing by 5% to 330.3 million gallons.

- Ice cream continues to dominate the market and represents 66% of total production, followed by ice milk 23%, sherbet 3.5%, water ices 3.5%, with the balance other frozen dairy products and mellorine.

- June was the highest producing month of ice cream and related products, accounting for 10.8% of the total, followed closely by July with 10.7%. November ranked the lowest with 6.26% of the total.

- Seventy-eight percent of ice milk is soft serve, while only 5% of ice cream is produced in this form.

- Superpremium and premium ice creams represent about 38.5% of the total dollar sales of ice cream.

- California produced the largest amount of ice cream with a total volume of 160 million gallons, 11% of the nation's output. Pennsylvania ranked second with a total gallonage of 115 million.

- The North West Central region now claims the highest per capita production of ice cream with 23.52 quarts, followed closely by New England with 23.50 quarts. The North West Central region also reported the highest per capita production of ice milk, 9.43 quarts, and the total of all ice cream products of 36.87 quarts.

- The North West Central region reported a gain of 5% in ice cream production and 16.7% in ice milk in 1987.

- Sales at ice cream and frozen custard stands are forecast to increase 7% in 1988 for a total of $1.7 billion.

- Ice cream plants, excluding counter freezers, totaled 829, down 24% from 10 years earlier.

- Capital expenditures for new plants and equipment in the ice cream industry amounted to $105 million in 1986, of which $85.8 million was used for equipment and $19.6 million for new plants.

- The retail value of ice cream and related products is estimated to be over $9 billion.

- The industry employs 18,200 people and has an annual payroll of $383.2 million.

## ICE CREAM AND RELATED PRODUCTS
## PRODUCTION AND PER CAPITA - 1987

| | 1987 | % Change from 1986 |
|---|---|---|
| Total Ice Cream & Related Products | 1,408,867,000 gals. | + 1.92 |
| Per Capita Production | 23.15 qts. | + 0.96 |
| Ice Cream (Hard and Soft) | 931,398,000 gals. | + 0.84 |
| Per Capita Production | 15.31 qts. | - 0.07 |
| Ice Milk (Hard and Soft) 1/ | 330,312,000 gals. | + 4.97 |
| Per Capita Production | 5.43 qts. | + 4.02 |
| Sherbet (Hard and Soft) | 49,709,000 gals. | + 0.06 |
| Per Capita Production | 0.82 qts. | 0.0 |
| Water Ices (Hard) 2/ | 48,613,000 gals. | - 4.56 |
| Per Capita Production | 0.80 qts. | - 5.88 |
| Mellorine (Hard and Soft) 3/ | 10,110,000 gals. | +19.94 |
| Per Capita Production | 0.16 qts. | +14.29 |
| Other Frozen Dairy Products 4/ | 38,725,000 gals. | +10.60 |
| Per Capita Production | 0.63 qts. | + 8.62 |

1/ Includes freezer-made milkshake.
2/ Also contains sorbet, frozen juice bars and gelatin pops.
3/ Also includes other vegetable fat products and tofu-based products.
4/ Includes soft yogurt mix, pudding pops and miscellaneous frozen dairy products.

## INTERNATIONAL REVIEW

United States continues as the largest consumer of ice cream and related products with a per capita production of 46.30 pints in 1987. Ice cream per capita was 30.61 pints.

Finland now ranks in second place with a reported consumption of 42.10 pints of ice cream.

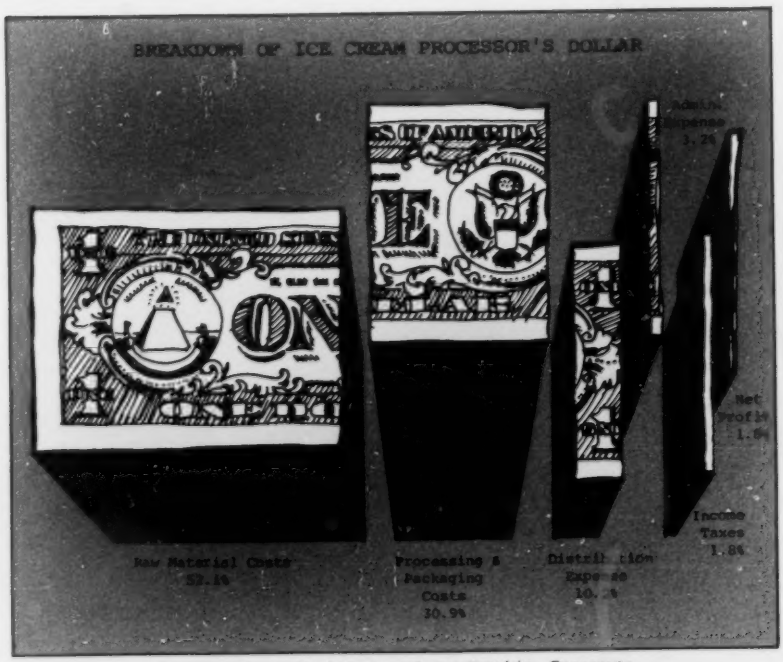
Australia is the third largest user of ice cream and related products with a per capita consumption of 37.62 pints and a per capita of 27.00 pints of ice cream.

New Zealand ranks in fourth place with a per capita production of 32.76 pints of ice cream and related products and 29.67 pints of ice cream.

Canada, with a per capita production of 30.61 pints of ice cream and related products and 25.46 pints of ice cream, is in fifth place.

THE "REAL" PRICE OF ICE CREAM
1977-1987

| Year | Average Wages Production Workers | Average Retail Price of Ice Cream | Labor Required to Purchase Half Gallon of Ice Cream |
|---|---|---|---|
| | $ per Hour | ¢ per ½ Gallon | Minutes |
| 1977 | 5.68 | 135.2 | 14.3 |
| 1978 | 6.17 | 146.2 | 14.2 |
| 1979 | 6.70 | 163.3 | 14.6 |
| 1980 | 7.27 | 182.3 | 15.0 |
| 1981 | 7.99 | 201.6 | 15.1 |
| 1982 | 8.49 | 210.3 | 14.9 |
| 1983 | 8.83 | 215.8 | 14.7 |
| 1984 | 9.19 | 221.8 | 14.5 |
| 1985 | 9.54 | 229.9 | 14.5 |
| 1986 | 9.73 | 235.7 | 14.5 |
| 1987 | 9.91 | 246.0 | 14.9 |
| % Change 1977-1987 | + 74% | + 82% | + 4% |




Source: E. B. McClain Co., Inc., Memphis, Tennessee

PRODUCTION OF ICE CREAM AND RELATED PRODUCTS, (HARD AND SOFT)
BY STATES AND REGIONS - 1987

| STATE & REGION | ICE CREAM | ICE MILK 1/ | SHERBET | WATER ICES 2/ | MELLORINE TYPE PRODUCTS 3/ | OTHER FROZEN DAIRY PRODUCTS 4/ | TOTAL FROZEN PRODUCTS |
|---|---|---|---|---|---|---|---|
| | | | (Thousand Gallons) | | | | |
| NEW ENGLAND | | | | | | | |
| Maine | 5/ | 5/ | 5/ | 5/ | | | 5/ |
| New Hampshire | 5/ | 5/ | 5/ | | | | 5/ |
| Vermont | 5/ | 5/ | 5/ | | | | 5/ |
| Massachusetts | 48,826 | 5/ | 1,947 | 5/ | | 5/ | 50,773 |
| Rhode Island | 5/ | 5/ | 5/ | 5/ | | 5/ | 5/ |
| Connecticut | 5/ | 5/ | 5/ | 5/ | | | 5/ |
| MID ATLANTIC | | | | | | | |
| New York | 46,984 | 11,872 | 4,009 | 5,214 | 5/ | 5/ | 68,079 |
| New Jersey | 22,038 | 5,193 | 216 | 5/ | | | 27,447 |
| Pennsylvania | 90,297 | 17,737 | 3,727 | 2,605 | | 661 | 115,027 |
| E. N. CENTRAL | | | | | | | |
| Ohio | 43,804 | 10,311 | 2,955 | 2,195 | | 1,477 | 60,742 |
| Indiana | 27,666 | 7,227 | 1,628 | 5/ | 5/ | 1,200 | 37,721 |
| Illinois | 29,471 | 24,616 | 1,517 | 440 | 149 | 5/ | 56,193 |
| Michigan | 34,508 | 12,972 | 1,893 | | 5/ | 5/ | 49,373 |
| Wisconsin | 25,434 | 6,268 | 1,234 | 2,885 | | 316 | 36,137 |
| W. N. CENTRAL | | | | | | | |
| Minnesota | 41,080 | 12,450 | 2,196 | 5/ | | 5/ | 55,726 |
| Iowa | 23,926 | 9,778 | 2,343 | 2,717 | 5/ | 5/ | 38,764 |
| Missouri | 22,165 | 7,975 | 1,282 | 5/ | 5/ | 5/ | 31,422 |
| North Dakota | 2,048 | 995 | 194 | 5/ | | | 3,237 |
| South Dakota | 5/ | 5/ | | | | | 5/ |
| Nebraska | 5/ | 3,685 | 5/ | 5/ | | 5/ | 3,685 |
| Kansas | 8,371 | 5,793 | 523 | 5/ | 5/ | 5/ | 14,687 |
| SOUTH ATLANTIC | | | | | | | |
| Maryland & D.C. | 17,529 | 6,640 | 955 | 5/ | 5/ | 5/ | 25,124 |
| Delaware | 5/ | 5/ | 5/ | | | 5/ | 5/ |
| Virginia | 14,324 | 6,278 | 110 | 5/ | 5/ | 5/ | 20,712 |
| West Virginia | 2,755 | 2,069 | 155 | 5/ | | 5/ | 4,979 |
| North Carolina | 30,269 | 7,969 | 1,522 | 1,172 | | 1,691 | 42,623 |
| South Carolina | 15,155 | 2,727 | 989 | 5/ | 5/ | 5/ | 18,871 |
| Georgia | 9,577 | 9,155 | 831 | 5/ | | 5/ | 19,563 |
| Florida | 32,621 | 17,604 | 1,551 | 1,694 | 5/ | 5/ | 53,470 |
| SOUTH CENTRAL | | | | | | | |
| Kentucky | 5/ | 5/ | 5/ | 5/ | | 5/ | 5/ |
| Tennessee | 21,267 | 6,794 | 1,005 | 5/ | 5/ | 5/ | 29,066 |
| Alabama | 20,788 | 9,210 | 1,738 | 5/ | 5/ | 5/ | 31,736 |
| Mississippi | 3,321 | 2,644 | 224 | 5/ | | | 6,189 |
| Arkansas | 6,200 | 1,866 | 253 | 5/ | 602 | | 8,921 |
| Louisiana | 7,564 | 4,052 | 5/ | 5/ | | 5/ | 11,616 |
| Oklahoma | 12,887 | 4,548 | 812 | 5/ | 5/ | 155 | 18,402 |
| Texas | 55,648 | 22,619 | 2,628 | 2,241 | 4,690 | 1,796 | 89,622 |
| MOUNTAIN | | | | | | | |
| Montana | 1,511 | 1,094 | 5/ | 5/ | | 5/ | 2,605 |
| Idaho | 5/ | 5/ | 5/ | 5/ | | | 5/ |
| Wyoming | 5/ | 5/ | 5/ | | | | 5/ |
| Colorado | 9,948 | 5,672 | 321 | 486 | | 135 | 16,562 |
| New Mexico | 5/ | 5/ | 5/ | 5/ | 5/ | | 5/ |
| Arizona | 6,906 | 5,756 | 675 | | 5/ | 5/ | 13,337 |
| Utah | 9,824 | 2,507 | 660 | 2,565 | | 212 | 15,768 |
| Nevada | 5/ | 5/ | 5/ | | 5/ | | 5/ |
| PACIFIC | | | | | | | |
| Washington | 18,652 | 9,019 | 1,524 | 5/ | | 5/ | 29,195 |
| Oregon | 8,363 | 3,904 | 387 | 5/ | 5/ | | 12,654 |
| California | 108,288 | 32,414 | 4,895 | 2,876 | 281 | 11,193 | 159,947 |
| Other States 6/ | 51,383 | 28,899 | 2,810 | 21,523 | 4,388 | 19,889 | 128,892 |
| UNITED STATES | 931,398 | 330,312 | 49,709 | 48,613 | 10,110 | 38,725 | 1,408,867 |

1/ Includes freezer-made milkshake.
2/ Also contains sorbet, frozen juice bars and gelatin pops.
3/ Also includes other vegetable fat products and tofu-based products.
4/ Includes soft yogurt mix, pudding pops and miscellaneous frozen dairy products.
5/ State data not shown when less than 3 plants reported or individual operations might be disclosed -- included in "Other States" with Alaska and Hawaii.
6/ Includes varying states for each product.

Prepared by the International Ice Cream Association from data published by the U. S. Department of Agriculture.

## DEFINITIONS

- Selected Frozen Desserts -

ICE CREAM is a frozen food made from a mixture of dairy products, such as milk, cream and nonfat milk, combined with sugars, flavorings, fruits, nuts, etc. Ice cream which contains at least 1.4% egg yolks is called french ice cream or frozen custard. Ice cream and french ice cream contain a minimum of 10% milkfat and weigh not less than 4.5 pounds per gallon.

ICE MILK is a frozen dessert which is similar to ice cream except that it contains between 2% to 7% milkfat.

SHERBET, both fruit sherbet and those flavored with flavors other than fruit, contains between 1% to 2% milkfat and weighs not less than 6 pounds per gallon.

WATER ICES, both fruit ices and those flavored with flavors other than fruit, contain no dairy ingredients and weigh not less than 6 pounds per gallon.

MELLORINE is a frozen dessert similar to ice milk in which the milkfat is replaced, in whole or in part, with vegetable fat and the minimum fat content is 6%.

## NUTRITION HIGHLIGHTS 1/

| | Calories | Protein g. | Carbohydrate g. | Fat g. | Vitamin A I.U. | Calcium mg. | Phosphorus mg. | Riboflavin mg. |
|---|---|---|---|---|---|---|---|---|
| Vanilla Ice Cream (10% fat) | 135 | 2.4 | 15.9 | 7.2 | 271 | 88 | 67 | .164 |
| *% U.S. RDA 2/* | | *5.3%* | | | *5.4%* | *8.8%* | *6.7%* | *9.6%* |
| Vanilla Ice Cream (16% fat) | 175 | 2.1 | 16.0 | 11.8 | 448 | 76 | 58 | .141 |
| *% U.S. RDA 2/* | | [illegible] | | | *8.9%* | *7.6%* | *5.8%* | *8.2%* |
| Vanilla Ice Milk (4% fat) | 92 | 2.6 | 14.5 | 2.8 | 107 | 88 | 64 | .173 |
| *% U.S. RDA 2/* | | *5.7%* | | | *2.1%* | *8.8%* | *6.4%* | *10.1%* |
| Orange Sherbet (2% fat) | 135 | 1.1 | 29.4 | 1.9 | 93 | 52 | 37 | .045 |
| *% U.S. RDA 2/* | | *2.4%* | | | *1.8%* | *5.2%* | *3.7%* | *2.6%* |

1/ Values presented per 1/2 cup (approximately 4 fluid ounces). Source: Calculated from USDA Agricultural Handbook 8-1 (November 1976) data.

2/ United States Recommended Daily Allowance.

EMPLOYEES, WAGES AND VALUE OF SHIPMENTS
FROZEN DESSERTS INDUSTRY, 1947-1986

| Year | All Employees 1/ | | Production Workers 1/ | | Wages 1/ | Value of Product Shipments 2/ |
|---|---|---|---|---|---|---|
| | Number | Payroll | Number | Manhours | | |
| | Thousands | Million Dollars | Thousands | Millions | Million Dollars | Million Dollars |
| 1947 | 46.7 | 119.3 | 29.3 | 52.8 | 66.1 | 802.0 |
| 1954 | 36.5 | 134.2 | 21.0 | 42.4 | 64.2 | 954.3 |
| 1958 | 34.8 | 153.9 | 18.7 | 37.7 | 72.4 | 1,137.7 |
| 1963 | 29.6 | 162.8 | 15.6 | 32.5 | 76.6 | 1,210.0 |
| 1967 | 24.6 | 156.4 | 13.8 | 27.2 | 77.2 | 1,273.6 |
| 1968 | 23.7 | 158.2 | 13.2 | 26.6 | 79.8 | 1,330.0 |
| 1969 | 22.7 | 159.2 | 12.6 | 25.4 | 80.6 | 1,334.8 |
| 1970 | 24.1 | 166.8 | 13.9 | 26.1 | 85.9 | 1,343.2 |
| 1971 | 22.6 | 173.5 | 12.8 | 25.1 | 87.7 | 1,389.0 |
| 1972 | 21.1 | 184.7 | 12.0 | 23.5 | 94.7 | 1,519.4 |
| 1973 | 21.3 | 195.9 | 12.1 | 24.1 | 100.0 | 1,639.5 |
| 1974 | 21.3 | 196.5 | 11.8 | 22.9 | 108.0 | 1,787.9 |
| 1975 | 20.2 | 208.5 | 11.1 | 22.0 | 116.4 | 2,012.9 |
| 1976 | 20.3 | 223.6 | 11.3 | 22.3 | 125.3 | 2,063.3 |
| 1977 | 19.1 | 247.0 | 11.4 | 22.7 | 130.1 | 2,229.4 |
| 1978 | 18.5 | 252.5 | 11.3 | 21.9 | 136.6 | 2,397.2 |
| 1979 | 19.9 | 277.4 | 12.3 | 24.3 | 151.9 | 2,733.2 |
| 1980 | 19.6 | 288.6 | 12.3 | 23.7 | 163.0 | 3,041.5 |
| 1981 | 20.1 | 325.6 | 12.0 | 23.0 | 167.1 | 3,322.1 |
| 1982 | 17.8 | 313.5 | 11.1 | 20.9 | 177.3 | 3,281.1 |
| 1983 | 17.7 | 349.7 | 9.5 | 19.7 | 174.0 | 3,414.5 |
| 1984 | 20.0 | 367.2 | 12.2 | 23.1 | 200.4 | 3,809.9 |
| 1985 | 18.9 | 384.7 | 11.7 | 21.5 | 199.8 | 3,881.8 |
| 1986 | 18.2 | 383.2 | 11.7 | 22.3 | 219.0 | 3,922.0 |

1/ Data for plants with ice cream and other frozen desserts as the leading product group in value of shipments.

2/ Includes value of shipments of ice cream and other frozen desserts by plants classified in other industries, such as fluid milk.

Source: Bureau of the Census, U. S. Department of Commerce.

CAPITAL EXPENDITURES FOR NEW PLANTS AND EQUIPMENT
FROZEN DESSERTS INDUSTRY, 1947-1986

| Year | Total Million Dollars | For Plants Million Dollars | Share of Total Percent | For Equipment Million Dollars | Share of Total Percent |
|---|---|---|---|---|---|
| 1947 | 36.0 | 5.4 | 15.0 | 30.6 | 85.0 |
| 1954 | 25.7 | 4.2 | 16.3 | 21.5 | 83.7 |
| 1958 | 26.1 | 5.1 | 19.5 | 21.0 | 80.5 |
| 1963 | 31.9 | 8.1 | 25.4 | 23.8 | 74.6 |
| 1967 | 26.6 | 5.7 | 21.4 | 20.9 | 78.6 |
| 1968 | 22.1 | 2.8 | 12.7 | 19.3 | 87.3 |
| 1969 | 30.3 | 5.6 | 18.5 | 24.7 | 81.5 |
| 1970 | 43.7 | 15.8 | 36.2 | 27.9 | 63.8 |
| 1971 | 28.0 | 5.7 | 20.4 | 22.3 | 79.6 |
| 1972 | 35.8 | 7.5 | 20.9 | 29.3 | 79.1 |
| 1973 | 29.2 | 9.7 | 33.2 | 19.5 | 66.8 |
| 1974 | 27.8 | 6.2 | 22.3 | 21.6 | 77.7 |
| 1975 | 37.2 | 10.1 | 27.2 | 27.0 | 72.6 |
| 1976 | 43.2 | 11.9 | 27.5 | 31.3 | 72.5 |
| 1977 | 56.8 | 19.4 | 33.4 | 38.7 | 66.6 |
| 1978 | 56.4 | 12.6 | 22.3 | 43.8 | 77.7 |
| 1979 | 46.3 | 12.8 | 27.6 | 33.5 | 72.4 |
| 1980 | 46.8 | 11.1 | 23.7 | 35.7 | 76.3 |
| 1981 | 41.8 | 6.1 | 14.6 | 35.7 | 85.4 |
| 1982 | 79.9 | 16.3 | 20.4 | 63.6 | 79.6 |
| 1983 | 75.5 | 9.3 | 12.3 | 66.2 | 87.7 |
| 1984 | 84.0 | 17.3 | 20.6 | 66.7 | 79.4 |
| 1985 | 1/ | 1/ | 1/ | 1/ | 1/ |
| 1986 | 105.4 | 19.6 | 18.6 | 85.8 | 81.4 |

1/ Withheld to avoid disclosing data for individual companies.

Source: Bureau of the Census, U. S. Department of Commerce.

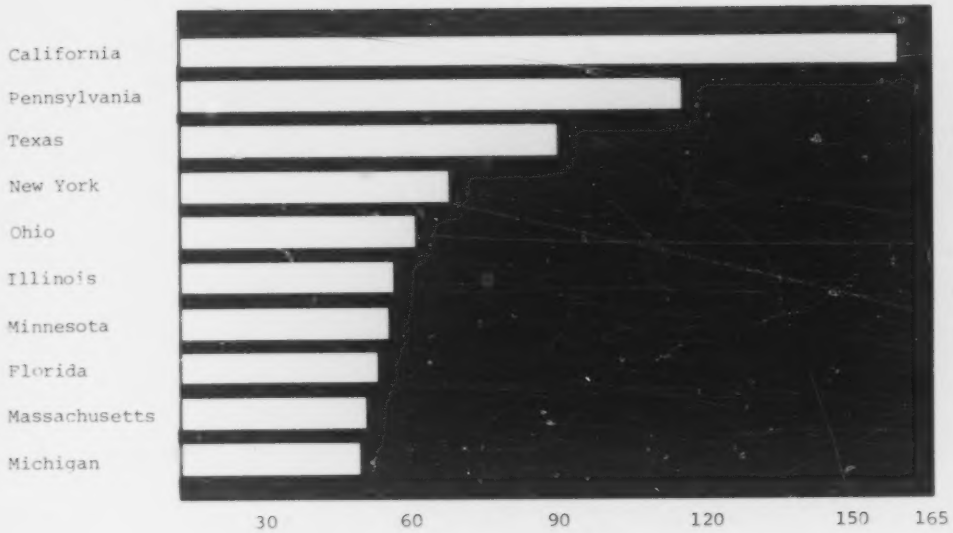
TOTAL AND PER CAPITA PRODUCTION (HARD AND SOFT)
ICE CREAM AND RELATED PRODUCTS
1859-1987

| YEAR | ALL PRODUCTS REPORTED | | ICE CREAM | | ICE MILK 2/ | | SHERBET | | WATER ICES 3/ | | OTHER FROZEN DAIRY PRODUCTS 4/ | | MELLORINE-TYPE PRODUCTS 5/ | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total 1/ 1,000 Gallons | Per Capita Quarts | Total 1,000 Gallons | Per Capita Quarts | Total 1,000 Gallons | Per Capita Quarts | Total 1,000 Gallons | Per Capita Quarts | Total 1,000 Gallons | Per Capita Quarts | Total 1,000 Gallons | Per Capita Quarts | Total 1,000 Gallons | Per Capita Quarts |
| 1859 | 4 | | 4 | | | | | | | | | | | |
| 1869 | 24 | | 24 | | | | | | | | | | | |
| 1879 | 144 | 0.01 | 144 | 0.01 | | | | | | | | | | |
| 1889 | 851 | 0.06 | 851 | 0.06 | | | | | | | | | | |
| 1899 | 5,021 | 0.27 | 5,021 | 0.27 | | | | | | | | | | |
| 1909 | 29,637 | 1.31 | 29,637 | 1.31 | | | | | | | | | | |
| 1919 | 152,982 | 5.86 | 152,982 | 5.86 | | | | | | | | | | |
| 1920 | 171,248 | 6.43 | 171,248 | 6.43 | | | | | | | | | | |
| 1930 | 255,439 | 8.30 | 255,439 | 8.30 | | | | | | | | | | |
| 1940 | 339,544 | 10.29 | 318,088 | 9.64 | 10,457 | 0.32 | 8,089 | 0.24 | | | 2,910 | 0.09 | | |
| 1950 | 634,768 | 16.79 | 554,351 | 14.66 | 36,870 | 0.98 | 17,018 | 0.45 | 18,299 | 0.48 | 8,230 | 0.22 | | |
| 1955 | 819,934 | 19.96 | 628,525 | 15.30 | 90,185 | 2.20 | 37,365 | 0.91 | 28,158 | 0.69 | 3,440 | 0.08 | 32,261 | 0.78 |
| 1960 | 969,004 | 21.54 | 699,605 | 15.55 | 145,177 | 3.23 | 40,734 | 0.91 | 33,361 | 0.74 | 4,913 | 0.11 | 45,214 | 1.00 |
| 1965 | 1,130,215 | 23.36 | 757,000 | 15.65 | 230,992 | 4.77 | 45,449 | 0.94 | 37,119 | 0.77 | 6,486 | 0.13 | 53,169 | 1.10 |
| 1970 | 1,193,144 | 23.42 | 761,732 | 14.95 | 286,663 | 5.63 | 48,887 | 0.96 | 37,265 | 0.73 | 6,719 | 0.13 | 51,878 | 1.02 |
| 1975 | 1,263,213 | 23.45 | 836,552 | 15.53 | 298,789 | 5.55 | 48,542 | 0.90 | 38,230 | 0.71 | 11,062 | 0.20 | 30,038 | 0.56 |
| 1980 | 1,225,223 | 21.58 | 829,798 | 14.61 | 293,384 | 5.17 | 45,187 | 0.80 | 33,386 | 0.59 | 10,278 | 0.18 | 13,190 | 0.23 |
| 1985 | 1,360,974 | 22.80 | 901,449 | 15.10 | 301,312 | 5.05 | 48,206 | 0.81 | 49,842 | 0.83 | 51,413 | 0.86 | 8,752 | 0.15 |
| 1986 | 1,382,329 | 22.93 | 923,597 | 15.32 | 314,673 | 5.22 | 49,679 | 0.82 | 50,937 | 0.85 | 35,014 | 0.58 | 8,429 | 0.14 |
| 1987 | 1,408,867 | 23.15 | 931,398 | 15.31 | 330,312 | 5.43 | 49,709 | 0.82 | 48,613 | 0.80 | 38,725 | 0.63 | 10,110 | 0.16 |

1/ Data from 1859 to 1919 indicate only the estimated trend of production.
2/ Includes freezer-made milkshake.
3/ Also contains sorbet, frozen juice bars and gelatin pops.
4/ Includes soft yogurt mix, pudding pops and miscellaneous frozen dairy products.
5/ Also contains other vegetable fat products and tofu-based products.

Prepared by the International Ice Cream Association from data published by the U. S. Department of Agriculture.

PRODUCTION OF ICE CREAM AND RELATED PRODUCTS (HARD AND SOFT)
TEN LEADING STATES, 1987




PRODUCTION OF ICE CREAM AND RELATED PRODUCTS
TEN LEADING STATES, 1987

| State | Ice Cream | Ice Milk | Sherbet | Water Ices | Mellorine Type Products | Total 1/ |
|---|---|---|---|---|---|---|
| | | | (Thousand Gallons) | | | |
| California | 108,289 | 32,414 | 4,895 | 2,876 | 281 | 159,947 |
| Pennsylvania | 90,297 | 17,737 | 3,727 | 2,605 | | 115,027 |
| Texas | 55,648 | 22,619 | 2,628 | 2,241 | 4,690 | 89,622 |
| New York | 46,984 | 11,872 | 4,009 | 5,214 | 2/ | 68,079 |
| Ohio | 43,804 | 10,311 | 2,955 | 2,195 | | 60,742 |
| Illinois | 29,471 | 24,616 | 1,517 | 440 | 149 | 56,193 |
| Minnesota | 41,080 | 12,450 | 2,196 | 2/ | | 55,726 |
| Florida | 32,621 | 17,604 | 1,551 | 1,694 | 2/ | 53,470 |
| Massachusetts | 48,826 | 2/ | 1,947 | 2/ | | 50,773 |
| Michigan | 34,508 | 12,972 | 1,893 | | | 49,373 |
| TOTAL--TEN STATES | 531,527 | 162,595 | 27,318 | 17,265 | 5,120 | 758,952 |
| PERCENT OF U. S. TOTAL | 57.1% | 49.2% | 55.0% | 35.5% | 50.6% | 53.9% |

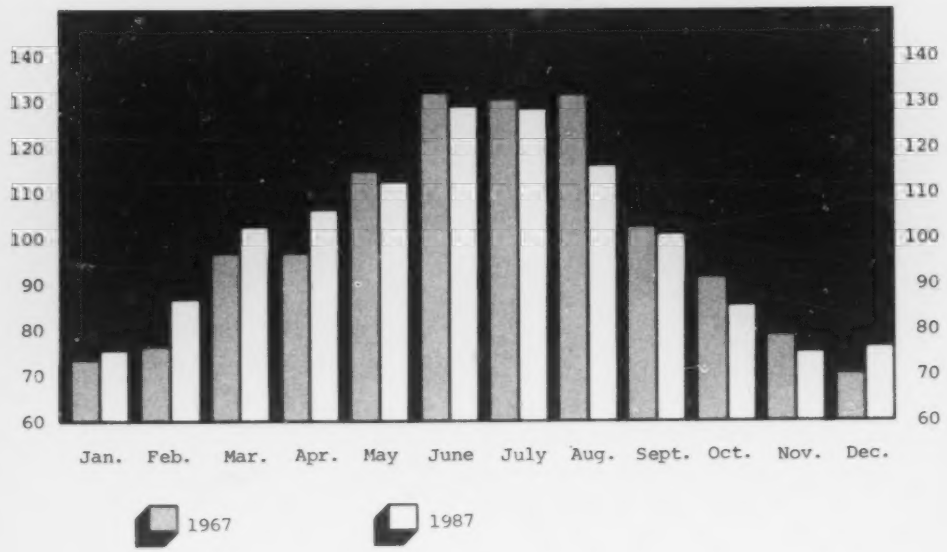
1/ Includes small amounts of other frozen products in addition to those shown separately.

2/ State data not shown when less than 3 plants reported or individual operations might be disclosed.

Prepared by the International Ice Cream Association from data published by the U. S. Department of Agriculture.

SEASONALITY OF PRODUCTION OF ICE CREAM
AND RELATED PRODUCTS - 1967-1987

**(Monthly production as a percent of annual average)**




MONTHLY PRODUCTION OF ICE CREAM AND RELATED PRODUCTS
AS A PERCENT OF ANNUAL AVERAGE, 1967-1987

| Month | 1967 | 1987 |
|---|---|---|
| January | 74.3 | 75.8 |
| February | 76.8 | 87.1 |
| March | 97.3 | 103.8 |
| April | 97.3 | 106.4 |
| May | 115.0 | 113.4 |
| June | 132.6 | 129.6 |
| July | 130.3 | 128.9 |
| August | 132.2 | 116.3 |
| September | 103.7 | 101.3 |
| October | 92.0 | 85.5 |
| November | 78.7 | 75.1 |
| December | 70.1 | 76.7 |

PRODUCTION OF MIX AND FROZEN PRODUCTS (HARD AND SOFT)
BY STATES AND REGIONS - 1987

| STATE & REGION | ICE CREAM MIX | ICE MILK MIX | SHERBET MIX | MELLORINE TYPE MIX | TOTAL MIX FOR FROZEN PRODUCTS |
|---|---|---|---|---|---|
| | (Thousand Gallons) | | | | |
| NEW ENGLAND | | | | | |
| Maine | | | | | 1/ |
| New Hampshire | | | | | 1/ |
| Vermont | | | | | 1/ |
| Massachusetts | 25,709 | 2,455 | 1,336 | | 29,500 |
| Rhode Island | | | | | 1/ |
| Connecticut | | | | | 1/ |
| MID ATLANTIC | | | | | |
| New York | 25,398 | 3,562 | 2,816 | | 31,776 |
| New Jersey | 16,470 | | | | 16,470 |
| Pennsylvania | 47,265 | 9,065 | 2,606 | | 58,936 |
| E. N. CENTRAL | | | | | |
| Ohio | 24,385 | 7,093 | 2,013 | | 33,491 |
| Indiana | 12,416 | 7,324 | 1,072 | | 20,812 |
| Illinois | 17,060 | 15,999 | 932 | | 33,991 |
| Michigan | 17,093 | 8,154 | 1,103 | | 26,350 |
| Wisconsin | 12,659 | 2,928 | 720 | | 16,307 |
| W. N. CENTRAL | | | | | |
| Minnesota | 19,991 | | 1,248 | | 21,239 |
| Iowa | 12,241 | 6,009 | 1,824 | | 20,074 |
| Missouri | 8,016 | 4,593 | 819 | | 13,428 |
| North Dakota | 894 | 621 | 125 | | 1,640 |
| South Dakota | | | | | 1/ |
| Nebraska | | 2,628 | | | 2,628 |
| Kansas | 3,863 | 4,170 | 282 | | 8,315 |
| SOUTH ATLANTIC | | | | | |
| Maryland & D. C. | 7,884 | | 684 | | 8,568 |
| Virginia | 7,719 | 6,719 | 78 | | 14,516 |
| West Virginia | 1,152 | 840 | 62 | | 2,054 |
| North Carolina | 15,974 | 4,541 | 981 | | 21,496 |
| South Carolina | 7,728 | 1,906 | 647 | | 10,281 |
| Georgia | 4,610 | 6,284 | 510 | | 11,404 |
| Florida | 16,820 | 11,064 | 1,000 | | 28,884 |
| SOUTH CENTRAL | | | | | |
| Kentucky | | 3,092 | | | 3,092 |
| Tennessee | 11,049 | 2,900 | 662 | | 14,611 |
| Alabama | 11,214 | 5,114 | 1,356 | | 17,684 |
| Mississippi | 1,726 | 1,678 | 140 | | 3,544 |
| Arkansas | 3,241 | 1,246 | 148 | 142 | 4,777 |
| Louisiana | | | | | 1/ |
| Oklahoma | 8,880 | 2,483 | | | 11,363 |
| Texas | 28,490 | 12,234 | 1,490 | 2,419 | 44,633 |
| MOUNTAIN | | | | | |
| Montana | 1,010 | 675 | 54 | | 1,739 |
| Idaho | | | | | 1/ |
| Wyoming | | | | | 1/ |
| Colorado | 5,430 | 3,812 | 231 | | 9,473 |
| New Mexico | | | | | 1/ |
| Arizona | | 3,736 | | | 3,736 |
| Utah | 5,168 | 1,953 | 417 | | 7,538 |
| Nevada | | | | | 1/ |
| PACIFIC | | | | | |
| Washington | 9,414 | 3,925 | 1,139 | | 14,478 |
| Oregon | 4,224 | 2,528 | 219 | | 6,971 |
| California | 53,654 | 20,357 | 3,309 | 139 | 77,459 |
| Other States 2/ | 34,297 | 37,761 | 2,199 | 3,928 | 78,185 |
| UNITED STATES | 483,144 | 209,449 | 32,222 | 6,628 | 731,443 |

1/ State data not shown when less than 3 plants reported or individual operations might be disclosed, included in "Other States" with Alaska and Hawaii.

2/ Includes varying states for each product.

Prepared by International Ice Cream Association from data published by U. S. Department of Agriculture.

MONTHLY PRODUCTION OF ICE CREAM AND RELATED PRODUCTS (HARD AND SOFT)
1985-1987

| Year | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | (Thousand Gallons) | | | | | | | |
| | | | | | | ALL FROZEN PRODUCTS 1/ | | | | | | | |
| 1985 | 88,999 | 89,716 | 111,944 | 118,819 | 135,489 | 140,076 | 148,493 | 137,940 | 115,431 | 104,867 | 85,978 | 83,222 | 1,360,974 |
| 1986 | 89,162 | 95,134 | 114,986 | 122,678 | 136,278 | 144,123 | 149,156 | 137,978 | 114,602 | 106,361 | 85,293 | 86,578 | 1,382,329 |
| 1987 | 88,986 | 102,294 | 121,839 | 124,964 | 133,144 | 152,190 | 151,353 | 136,545 | 118,935 | 100,353 | 88,172 | 90,092 | 1,408,867 |
| | | | | | | ICE CREAM | | | | | | | |
| 1985 | 61,977 | 60,814 | 74,369 | 76,066 | 86,254 | 90,227 | 95,945 | 90,040 | 77,097 | 70,511 | 59,541 | 58,608 | 901,449 |
| 1986 | 61,968 | 66,002 | 76,598 | 79,638 | 87,764 | 92,460 | 96,038 | 91,054 | 77,938 | 73,243 | 60,291 | 60,603 | 923,597 |
| 1987 | 61,366 | 70,455 | 81,295 | 82,088 | 85,814 | 97,512 | 97,074 | 88,818 | 79,383 | 66,631 | 59,749 | 61,213 | 931,398 |
| | | | | | | ICE MILK | | | | | | | |
| 1985 | 17,245 | 17,892 | 23,981 | 27,797 | 31,869 | 31,653 | 34,849 | 32,273 | 25,958 | 23,518 | 17,918 | 16,359 | 301,312 |
| 1986 | 18,979 | 19,499 | 25,781 | 28,908 | 32,640 | 33,833 | 35,113 | 32,324 | 26,116 | 24,352 | 18,276 | 18,852 | 314,673 |
| 1987 | 19,138 | 21,634 | 27,437 | 29,109 | 31,715 | 36,725 | 37,205 | 32,863 | 27,980 | 24,982 | 20,572 | 20,952 | 330,312 |
| | | | | | | SHERBET | | | | | | | |
| 1985 | 3,166 | 3,000 | 4,046 | 4,427 | 5,112 | 5,203 | 5,533 | 4,871 | 3,743 | 3,300 | 2,747 | 3,058 | 48,206 |
| 1986 | 3,120 | 3,208 | 3,938 | 4,449 | 5,198 | 5,657 | 6,080 | 4,993 | 3,859 | 3,313 | 2,703 | 3,161 | 49,679 |
| 1987 | 3,154 | 3,393 | 4,060 | 4,727 | 4,796 | 5,809 | 5,629 | 4,928 | 4,104 | 3,129 | 2,820 | 3,160 | 49,709 |
| | | | | | | WATER ICES | | | | | | | |
| 1985 | 2,446 | 3,426 | 4,293 | 5,142 | 6,306 | 6,843 | 6,333 | 5,283 | 3,900 | 2,750 | 1,703 | 1,417 | 49,842 |
| 1986 | 2,590 | 3,538 | 4,714 | 5,596 | 6,225 | 7,465 | 7,342 | 5,143 | 3,040 | 2,149 | 1,506 | 1,629 | 50,937 |
| 1987 | 2,798 | 3,527 | 5,037 | 4,812 | 5,998 | 6,731 | 6,102 | 5,078 | 3,130 | 2,082 | 1,806 | 1,512 | 48,613 |
| | | | | | | MELLORINE TYPE PRODUCTS | | | | | | | |
| 1985 | 579 | 619 | 814 | 841 | 887 | 878 | 881 | 876 | 735 | 720 | 468 | 454 | 8,752 |
| 1986 | 470 | 584 | 811 | 815 | 874 | 847 | 920 | 867 | 754 | 736 | 369 | 382 | 8,429 |
| 1987 | 586 | 686 | 861 | 815 | 973 | 1,194 | 1,180 | 1,104 | 967 | 677 | 556 | 511 | 10,110 |

1/ Includes other frozen dairy products in addition to those shown separately.

Prepared by the International Ice Cream Association from data published by U. S. Department of Agriculture.

PRODUCTION OF ICE CREAM AND RELATED PRODUCTS (HARD AND SOFT)
BY REGIONS - 1987

| REGION | ICE CREAM | ICE MILK 1/ | SHERBET | WATER ICES 2/ | MELLORINE TYPE PRODUCTS 3/ | OTHER FROZEN DAIRY PRODUCTS 4/ | TOTAL FROZEN PRODUCTS |
|---|---|---|---|---|---|---|---|
| | | | (Thousand Gallons) | | | | |
| New England | 75,446 | 16,060 | 3,115 | 1,638 | | 391 | 96,650 |
| Mid Atlantic | 159,319 | 34,802 | 7,952 | 8,634 | 331 | 7,250 | 218,288 |
| E. N. Central | 160,883 | 61,394 | 9,227 | 7,012 | 227 | 4,585 | 243,328 |
| W. N. Central | 103,701 | 41,561 | 6,750 | 7,850 | 1,097 | 1,592 | 162,551 |
| South Atlantic | 122,266 | 52,591 | 6,184 | 9,811 | 495 | 10,214 | 201,561 |
| South Central | 132,452 | 56,692 | 7,145 | 5,898 | 7,329 | 2,782 | 212,298 |
| Mountain | 39,661 | 19,790 | 2,345 | 3,760 | 262 | 473 | 66,291 |
| Pacific | 135,303 | 45,337 | 6,806 | 3,896 | 369 | 11,438 | 203,149 |
| UNITED STATES 5/ | 931,398 | 330,312 | 49,709 | 48,613 | 10,110 | 38,725 | 1,408,867 |

1/ Includes freezer-made milkshake.
2/ Also contains sorbet, frozen juice bars and gelatin pops.
3/ Also includes other vegetable fat products and tofu-based products.
4/ Includes soft yogurt mix, pudding pops and miscellaneous frozen dairy products.
5/ Includes Alaska and Hawaii.

Prepared by International Ice Cream Association from data released by U. S. Department of Agriculture

PER CAPITA PRODUCTION (HARD AND SOFT)
ICE CREAM AND RELATED PRODUCTS
BY REGIONS, 1960-1987

| Product & Year | New England | Mid Atlantic | E. N. Central | W. N. Central | South Atlantic | South Central | Mountain | Pacific | United States |
|---|---|---|---|---|---|---|---|---|---|
| | | | | (Quarts) | | | | | |
| ICE CREAM | | | | | | | | | |
| 1960 | 18.44 | 19.71 | 17.94 | 17.11 | 13.23 | 9.52 | 13.21 | 14.25 | 15.55 |
| 1965 | 20.06 | 18.74 | 18.19 | 18.00 | 13.40 | 9.57 | 12.88 | 14.89 | 15.65 |
| 1970 | 20.82 | 17.96 | 16.86 | 17.94 | 11.36 | 10.18 | 11.90 | 14.62 | 14.96 |
| 1975 | 24.72 | 16.27 | 17.40 | 19.23 | 12.33 | 11.71 | 10.96 | 15.77 | 15.53 |
| 1980 | 21.83 | 16.19 | 16.10 | 19.15 | 11.48 | 10.78 | 11.93 | 15.18 | 14.61 |
| 1985 | 22.88 | 16.83 | 15.59 | 21.36 | 12.03 | 12.11 | 11.61 | 15.57 | 15.10 |
| 1986 | 23.25 | 17.10 | 15.51 | 22.43 | 12.15 | 12.43 | 11.99 | 15.65 | 15.32 |
| 1987 | 23.50 | 17.02 | 15.36 | 23.52 | 11.73 | 12.55 | 12.05 | 15.49 | 15.31 |
| ICE MILK | | | | | | | | | |
| 1960 | 1.50 | 0.86 | 2.61 | 5.42 | 3.97 | 3.61 | 4.92 | 5.48 | 3.23 |
| 1965 | 2.10 | 2.01 | 4.50 | 6.59 | 6.52 | 5.54 | 5.47 | 6.21 | 4.77 |
| 1970 | 3.65 | 3.32 | 5.89 | 8.24 | 6.66 | 5.50 | 6.56 | 6.55 | 5.63 |
| 1975 | 5.34 | 3.40 | 6.49 | 7.70 | 5.86 | 5.14 | 5.18 | 5.95 | 5.55 |
| 1980 | 4.72 | 3.11 | 6.14 | 7.34 | 5.49 | 4.39 | 6.23 | 5.48 | 5.17 |
| 1985 | 4.40 | 2.93 | 5.21 | 8.57 | 5.05 | 5.12 | 5.83 | 5.23 | 5.05 |
| 1986 | 4.48 | 3.49 | 5.74 | 8.11 | 5.29 | 5.05 | 6.10 | 5.10 | 5.22 |
| 1987 | 5.00 | 3.72 | 5.86 | 9.43 | 5.05 | 5.37 | 6.01 | 5.20 | 5.43 |
| TOTAL FROZEN PRODUCTS 1/ | | | | | | | | | |
| 1960 | 21.76 | 22.34 | 22.91 | 24.98 | 18.97 | 18.19 | 20.01 | 23.96 | 21.54 |
| 1965 | 24.38 | 22.64 | 24.81 | 27.11 | 21.78 | 20.66 | 20.56 | 26.08 | 23.36 |
| 1970 | 26.55 | 23.06 | 25.06 | 28.46 | 19.48 | 20.48 | 20.06 | 25.64 | 23.43 |
| 1975 | 31.59 | 21.19 | 25.92 | 28.38 | 19.95 | 20.35 | 17.26 | 24.56 | 23.45 |
| 1980 | 28.41 | 20.83 | 24.13 | 29.24 | 18.53 | 17.38 | 19.29 | 22.44 | 21.58 |
| 1985 | 29.13 | 22.02 | 22.74 | 33.28 | 18.99 | 19.73 | 19.31 | 23.18 | 22.38 |
| 1986 | 29.70 | 22.83 | 23.24 | 33.96 | 20.31 | 19.91 | 19.73 | 23.14 | 22.93 |
| 1987 | 30.10 | 23.33 | 23.23 | 36.87 | 19.34 | 20.12 | 20.13 | 23.27 | 23.15 |

1/ Includes ice cream, ice milk, sherbet, mellorine-type products, water ices and other frozen dairy products.

Prepared by the International Ice Cream Association from production data released by the U. S. Department of Agriculture and population estimates from Bureau of the Census, U. S. Department of Commerce.

1987 PRODUCTION OF ICE CREAM, ICE MILK AND TOTAL FROZEN PRODUCTS
WITH PERCENTAGE CHANGE OVER 1986, BY REGION

| | ICE CREAM | | ICE MILK | | TOTAL FROZEN PRODUCTS 1/ | |
|---|---|---|---|---|---|---|
| | Total 1,000 Gallons | % Change over 1986 | Total 1,000 Gallons | % Change over 1986 | Total 1,000 Gallons | % Change over 1986 |
| New England | 75,446 | + 1.89 | 16,060 | +12.49 | 96,650 | + 2.20 |
| Mid Atlantic | 159,319 | - 0.05 | 34,802 | + 7.01 | 218,288 | + 2.60 |
| East North Central | 160,883 | - 0.61 | 61,394 | + 2.51 | 243,328 | + 0.36 |
| West North Central | 103,701 | + 5.21 | 41,561 | +16.66 | 162,551 | + 8.93 |
| South Atlantic | 122,266 | - 1.65 | 52,591 | - 2.84 | 201,561 | - 3.01 |
| South Central | 132,452 | + 1.34 | 56,692 | + 6.75 | 212,298 | + 1.38 |
| Mountain | 39,661 | + 1.61 | 19,790 | - 0.30 | 66,291 | + 3.22 |
| Pacific | 135,303 | + 1.32 | 45,337 | + 4.20 | 203,149 | + 2.84 |
| UNITED STATES 2/ | 931,398 | + 0.84 | 330,312 | + 4.97 | 1,408,867 | + 1.92 |

1/ Includes ice cream, ice milk, sherbet, water ices, mellorine-type products and other frozen dairy products.

2/ Includes Alaska and Hawaii.

Prepared by International Ice Cream Association from data released by U. S. Department of Agriculture.

NUMBER OF PLANTS PRODUCING ICE CREAM AND RELATED PRODUCTS
1960-1987

| Year | Ice Cream Including Counter Freezers | Ice Cream Excluding Counter Freezers | Ice Milk | Sherbet | Water Ices | Mellorine Type Products |
|---|---|---|---|---|---|---|
| 1960 | 16,591 | - | 23,843 | 5,067 | 2,376 | 1,242 |
| 1961 | 15,872 | - | 27,607 | 4,636 | 2,398 | 1,221 |
| 1962 | 14,541 | - | 30,919 | 3,764 | 2,353 | 1,364 |
| 1963 | 13,915 | 2,476 | 33,229 | 3,625 | 2,650 | 1,253 |
| 1964 | 13,106 | - | 34,485 | 3,395 | 2,691 | 1,313 |
| 1965 | 12,584 | - | 35,181 | 3,452 | 2,852 | 1,280 |
| 1966 | 12,063 | - | 36,158 | 3,580 | 2,682 | 1,308 |
| 1967 | 11,452 | - | 37,312 | 3,191 | 2,773 | 1,363 |
| 1968 | 11,228 | 1,873 | 39,474 | 3,108 | 2,854 | 1,792 |
| 1969 | 1/ | 1,739 | 1,160 2/ | 1,176 2/ | 1/ | 199 2/ |
| 1970 | | 1,628 | 1,088 | 1,122 2/ | 377 | 203 |
| 1971 | | 1,520 | 1,008 | 1,065 | 335 | 177 |
| 1972 | | 1,451 | 984 | 1,022 | 363 | 180 |
| 1973 | | 1,330 | 902 | 976 | 321 | 154 |
| 1974 | | 1,239 | 824 | 904 | 299 | 146 |
| 1975 | | 1,167 | 746 | 850 | 281 | 124 |
| 1976 | | 1,124 | 718 | 812 | 281 | 119 |
| 1977 | | 1,095 | 702 | 782 | 273 | 110 |
| 1978 | | 1,062 | 670 | 744 | 263 | 101 |
| 1979 | | 990 | 604 | 690 | 234 | 89 |
| 1980 | | 949 | 576 | 654 | 220 | 76 |
| 1981 | | 895 | 548 | 614 | 212 | 74 |
| 1982 | | 884 | 524 | 608 | 212 | 67 |
| 1983 | | 862 | 495 | 594 | 201 | 71 |
| 1984 | | 853 | 477 | 570 | 199 | 57 |
| 1985 | | 865 | 455 | 562 | 201 | 60 |
| 1986 | | 845 | 436 | 542 | 220 | 54 |
| 1987 | | 829 | 430 | 528 | 204 | 45 |

1/ Not available.
2/ After 1968, number of plants producing hard product. Number of counter freezers not available.

Prepared by the International Ice Cream Association from data published by the U. S. Department of Agriculture.

HARD FROZEN PRODUCTION - TOTAL AND PER CAPITA
ICE CREAM AND RELATED PRODUCTS
1955-1987 1/

| YEAR | ICE CREAM | | ICE MILK | | SHERBET | | MELLORINE TYPE PRODUCTS | | TOTAL FOUR PRODUCTS 2/ | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Total 1,000 Gallons | Per Capita Quarts | Total 1,000 Gallons | Per Capita Quarts | Total 1,000 Gallons | Per Capita Quarts | Total 1,000 Gallons | Per Capita Quarts | Total 1,000 Gallons | Per Capita Quarts |
| 1955 | 612,812 | 14.92 | 52,217 | 1.27 | 34,675 | 0.84 | 29,874 | 0.72 | 729,578 | 17.75 |
| 1960 | 678,383 | 15.08 | 80,073 | 1.78 | 37,931 | 0.84 | 42,603 | 0.95 | 838,990 | 18.65 |
| 1965 | 741,024 | 15.32 | 126,146 | 2.60 | 44,954 | 0.93 | 50,143 | 1.04 | 962,267 | 19.89 |
| 1970 | 736,741 | 14.47 | 134,240 | 2.64 | 47,643 | 0.94 | 40,775 | 0.80 | 959,399 | 18.85 |
| 1975 | 803,494 | 14.92 | 116,609 | 2.17 | 45,996 | 0.85 | 23,724 | 0.44 | 989,823 | 18.38 |
| 1980 | 801,876 | 14.12 | 83,584 | 1.47 | 43,745 | 0.77 | 9,927 | 0.17 | 939,132 | 16.53 |
| 1985 | 861,766 | 14.44 | 61,985 | 1.04 | 45,934 | 0.77 | 7,133 | 0.12 | 976,818 | 16.37 |
| 1986 | 886,702 | 14.71 | 67,733 | 1.12 | 47,231 | 0.78 | 7,559 | 0.13 | 1,009,225 | 16.74 |
| 1987 | 886,565 | 14.57 | 74,062 | 1.22 | 46,573 | 0.77 | 7,791 | 0.12 | 1,014,991 | 16.68 |

1/ Breakdown between hard frozen and soft serve production not available prior to 1955.

2/ Includes ice cream, ice milk, sherbet and mellorine type products.

Prepared by the International Ice Cream Association from data released by the U. S. Department of Agriculture.

HARD FROZEN PRODUCTION OF ICE CREAM AND RELATED PRODUCTS
BY REGIONS - 1987

| REGION | ICE CREAM | ICE MILK | SHERBET | MELLORINE TYPE PRODUCTS | TOTAL FOUR PRODUCTS 1/ |
|---|---|---|---|---|---|
| | | | (Thousand Gallons) | | |
| New England | 71,519 | 7,524 | 3,109 | | 82,152 |
| Mid Atlantic | 136,827 | 6,437 | 7,631 | 331 | 151,226 |
| E. N. Central | 153,587 | 11,150 | 8,292 | 3 | 173,032 |
| W. N. Central | 102,567 | 9,859 | 6,280 | 658 | 119,364 |
| South Atlantic | 119,634 | 10,480 | 6,015 | 141 | 136,270 |
| South Central | 126,719 | 15,110 | 6,735 | 6,280 | 154,844 |
| Mountain | 39,136 | 2,276 | 2,027 | 9 | 43,448 |
| Pacific | 134,242 | 11,135 | 6,299 | 369 | 152,045 |
| UNITED STATES 2/ | 886,565 | 74,062 | 46,573 | 7,791 | 1,014,991 |

1/ Includes ice cream, ice milk, sherbet and mellorine type products.

2/ Includes Alaska and Hawaii.

Prepared by the International Ice Cream Association from data released by U. S. Department of Agriculture.

PER CAPITA AND PERCENT OF TOTAL PRODUCTION OF HARD FROZEN PRODUCTS
ICE CREAM AND ICE MILK
BY REGIONS - 1960-1987

| Product & Year | New England | Mid Atlantic | E. N. Central | W. N. Central | South Atlantic | South Central | Mountain | Pacific | United States |
|---|---|---|---|---|---|---|---|---|---|
| | | | | (Quarts per Capita) | | | | | |
| ICE CREAM | | | | | | | | | |
| 1960 | 18.04 | 17.97 | 17.65 | 17.08 | 12.94 | 9.47 | 13.16 | 14.22 | 15.08 |
| 1965 | 19.95 | 17.45 | 17.97 | 17.96 | 13.27 | 9.50 | 12.83 | 14.87 | 15.32 |
| 1970 | 19.81 | 16.43 | 16.63 | 17.82 | 11.17 | 9.96 | 11.81 | 14.41 | 14.47 |
| 1975 | 24.45 | 14.52 | 16.86 | 17.94 | 12.08 | 11.48 | 10.92 | 15.69 | 14.92 |
| 1980 | 21.03 | 14.42 | 15.77 | 19.04 | 11.20 | 10.57 | 11.82 | 15.14 | 14.12 |
| 1985 | 22.19 | 14.64 | 14.98 | 21.18 | 11.40 | 11.91 | 11.43 | 15.45 | 14.44 |
| 1986 | 22.56 | 14.86 | 15.05 | 22.26 | 11.70 | 12.21 | 11.81 | 15.56 | 14.71 |
| 1987 | 22.28 | 14.62 | 14.66 | 23.27 | 11.48 | 12.01 | 11.89 | 15.37 | 14.57 |
| ICE MILK | | | | | | | | | |
| 1960 | 0.50 | 0.33 | 0.97 | 2.72 | 2.81 | 2.25 | 2.15 | 3.50 | 1.78 |
| 1965 | 0.66 | 0.96 | 1.88 | 3.26 | 4.73 | 3.75 | 2.20 | 2.89 | 2.60 |
| 1970 | 0.99 | 1.51 | 2.24 | 3.95 | 4.16 | 3.35 | 1.96 | 2.39 | 2.64 |
| 1975 | 2.34 | 1.46 | 1.89 | 3.13 | 2.58 | 2.59 | 1.74 | 1.91 | 2.17 |
| 1980 | 1.33 | 0.94 | 1.15 | 2.29 | 1.82 | 1.38 | 1.56 | 1.85 | 1.47 |
| 1985 | 1.28 | 0.53 | 0.82 | 1.99 | 1.18 | 1.18 | 0.67 | 1.12 | 1.04 |
| 1986 | 1.52 | 0.66 | 0.86 | 2.43 | 1.20 | 1.30 | 0.67 | 1.04 | 1.12 |
| 1987 | 2.34 | 0.69 | 1.07 | 2.24 | 1.01 | 1.43 | 0.69 | 1.28 | 1.22 |
| | | | | (Percent of Total Production of Hard Frozen Products | | | | | |
| ICE CREAM | | | | | | | | | |
| 1960 | 93 | 95 | 89 | 79 | 78 | 60 | 79 | 67 | 81 |
| 1965 | 92 | 91 | 85 | 79 | 70 | 54 | 77 | 68 | 77 |
| 1970 | 90 | 88 | 83 | 77 | 70 | 60 | 78 | 71 | 77 |
| 1975 | 88 | 87 | 85 | 81 | 78 | 70 | 80 | 80 | 81 |
| 1980 | 90 | 90 | 89 | 84 | 82 | 80 | 83 | 83 | 85 |
| 1985 | 91 | 92 | 90 | 87 | 86 | 84 | 90 | 89 | 88 |
| 1986 | 90 | 91 | 90 | 85 | 86 | 83 | 90 | 90 | 88 |
| 1987 | 87 | 91 | 89 | 86 | 88 | 82 | 90 | 88 | 87 |
| ICE MILK | | | | | | | | | |
| 1960 | 2 | 2 | 5 | 12 | 17 | 14 | 13 | 16 | 10 |
| 1965 | 3 | 5 | 9 | 14 | 25 | 21 | 13 | 13 | 13 |
| 1970 | 4 | 8 | 11 | 17 | 26 | 20 | 13 | 12 | 14 |
| 1975 | 8 | 9 | 10 | 14 | 17 | 16 | 13 | 10 | 12 |
| 1980 | 6 | 6 | 6 | 10 | 13 | 10 | 11 | 10 | 9 |
| 1985 | 5 | 3 | 5 | 8 | 9 | 8 | 5 | 6 | 6 |
| 1986 | 6 | 4 | 5 | 9 | 9 | 9 | 6 | 6 | 7 |
| 1987 | 9 | 4 | 6 | 8 | 8 | 10 | 5 | 8 | 7 |

Prepared by International Ice Cream Association from data released by the U. S. Department of Agriculture

SOFT SERVE PRODUCTION - TOTAL AND PER CAPITA
ICE CREAM AND RELATED PRODUCTS
1955-1987 1/

| YEAR | ICE CREAM | | ICE MILK | | SHERBET | | MELLORINE TYPE PRODUCTS | | TOTAL FOUR PRODUCTS 2/ | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Total 1,000 Gallons | Per Capita Quarts | Total 1,000 Gallons | Per Capita Quarts | Total 1,000 Gallons | Per Capita Quarts | Total 1,000 Gallons | Per Capita Quarts | Total 1,000 Gallons | Per Capita Quarts |
| 1955 | 15,713 | 0.38 | 37,968 | 0.93 | 2,690 | 0.07 | 2,387 | 0.06 | 58,758 | 1.44 |
| 1960 | 21,222 | 0.47 | 65,104 | 1.45 | 2,803 | 0.06 | 2,611 | 0.06 | 91,740 | 2.04 |
| 1965 | 15,976 | 0.33 | 104,846 | 2.17 | 495 | 0.01 | 3,026 | 0.06 | 124,343 | 2.57 |
| 1970 | 24,991 | 0.49 | 152,423 | 2.99 | 1,244 | 0.02 | 11,103 | 0.22 | 189,761 | 3.72 |
| 1975 | 33,058 | 0.61 | 182,180 | 3.38 | 2,546 | 0.05 | 6,314 | 0.12 | 224,098 | 4.16 |
| 1980 | 27,922 | 0.49 | 209,800 | 3.70 | 1,442 | 0.03 | 3,263 | 0.06 | 242,427 | 4.28 |
| 1985 | 39,683 | 0.66 | 239,327 | 4.01 | 2,272 | 0.04 | 1,619 | 0.03 | 282,901 | 4.74 |
| 1986 | 36,895 | 0.61 | 246,940 | 4.10 | 2,448 | 0.04 | 870 | 0.01 | 287,153 | 4.76 |
| 1987 | 44,833 | 0.74 | 256,250 | 4.21 | 3,136 | 0.05 | 2,319 | 0.04 | 306,538 | 5.04 |

1/ Breakdown between hard frozen and soft serve production not available prior to 1955.

2/ Includes ice cream, ice milk, sherbet and mellorine type products.

Prepared by the International Ice Cream Association from data released by the U. S. Department of Agriculture.

SOFT SERVE PRODUCTION OF ICE CREAM AND RELATED PRODUCTS
BY REGIONS - 1987

| REGION | ICE CREAM | ICE MILK | SHERBET | MELLORINE TYPE PRODUCTS | TOTAL FOUR PRODUCTS 1/ |
|---|---|---|---|---|---|
| | | | (Thousand Gallons) | | |
| New England | 3,927 | 8,536 | 6 | | 12,469 |
| Mid Atlantic | 22,492 | 28,365 | 321 | | 51,178 |
| E. N. Central | 7,296 | 50,244 | 935 | 224 | 58,699 |
| W. N. Central | 1,134 | 31,702 | 470 | 439 | 33,745 |
| South Atlantic | 2,632 | 42,111 | 169 | 354 | 45,266 |
| South Central | 5,733 | 41,582 | 410 | 1,049 | 48,774 |
| Mountain | 525 | 17,514 | 318 | 253 | 18,610 |
| Pacific | 1,061 | 34,202 | 507 | | 35,770 |
| UNITED STATES 2/ | 44,833 | 256,250 | 3,136 | 2,319 | 306,538 |

1/ Includes ice cream, ice milk, sherbet and mellorine type products.

2/ Includes Alaska and Hawaii.

Prepared by the International Ice Cream Association from data released by the U. S. Department of Agriculture.

PER CAPITA AND PERCENT OF TOTAL PRODUCTION OF SOFT SERVE PRODUCTS
ICE CREAM AND ICE MILK
BY REGIONS - 1960-1987

| Product & Year | New England | Mid Atlantic | E. N. Central | W. N. Central | South Atlantic | South Central | Mountain | Pacific | United States |
|---|---|---|---|---|---|---|---|---|---|
| | | | | (Quarts per Capita) | | | | | |
| ICE CREAM | | | | | | | | | |
| 1960 | 0.40 | 1.74 | 0.29 | 0.03 | 0.29 | 0.05 | 0.05 | 0.03 | 0.47 |
| 1965 | 0.11 | 1.29 | 0.22 | 0.04 | 0.13 | 0.07 | 0.05 | 0.02 | 0.33 |
| 1970 | 1.01 | 1.53 | 0.23 | 0.12 | 0.19 | 0.22 | 0.09 | 0.21 | 0.49 |
| 1975 | 0.27 | 1.75 | 0.54 | 1.29 | 0.25 | 0.23 | 0.04 | 0.08 | 0.61 |
| 1980 | 0.80 | 1.77 | 0.33 | 0.11 | 0.28 | 0.21 | 0.11 | 0.04 | 0.49 |
| 1985 | 0.69 | 2.19 | 0.61 | 0.18 | 0.63 | 0.20 | 0.18 | 0.12 | 0.66 |
| 1986 | 0.69 | 2.24 | 0.46 | 0.17 | 0.45 | 0.22 | 0.18 | 0.09 | 0.61 |
| 1987 | 1.22 | 2.40 | 0.70 | 0.25 | 0.25 | 0.54 | 0.16 | 0.12 | 0.74 |
| ICE MILK | | | | | | | | | |
| 1960 | 1.00 | 0.53 | 1.64 | 2.70 | 1.16 | 1.36 | 2.77 | 1.98 | 1.45 |
| 1965 | 1.44 | 1.05 | 2.62 | 3.33 | 1.79 | 1.79 | 3.27 | 3.32 | 2.17 |
| 1970 | 2.66 | 1.81 | 3.65 | 4.29 | 2.50 | 2.15 | 4.60 | 4.16 | 2.99 |
| 1975 | 3.00 | 1.94 | 4.60 | 4.57 | 3.28 | 2.55 | 3.44 | 4.04 | 3.38 |
| 1980 | 3.39 | 2.17 | 4.99 | 5.05 | 3.67 | 3.01 | 4.67 | 3.63 | 3.70 |
| 1985 | 3.12 | 2.40 | 4.39 | 6.58 | 3.87 | 3.94 | 5.16 | 4.11 | 4.01 |
| 1986 | 2.96 | 2.83 | 4.88 | 5.68 | 4.09 | 3.75 | 5.43 | 4.06 | 4.10 |
| 1987 | 2.66 | 3.03 | 4.79 | 7.19 | 4.04 | 3.94 | 5.32 | 3.92 | 4.21 |
| | | | | (Percent of Total Production of Soft Serve Products) | | | | | |
| ICE CREAM | | | | | | | | | |
| 1960 | 29 | 76 | 13 | 1 | 20 | 3 | 2 | 2 | 23 |
| 1965 | 7 | 55 | 8 | 1 | 7 | 3 | 2 | 1 | 13 |
| 1970 | 27 | 46 | 6 | 3 | 7 | 7 | 2 | 5 | 13 |
| 1975 | 8 | 47 | 10 | 21 | 7 | 7 | 1 | 2 | 15 |
| 1980 | 19 | 45 | 6 | 2 | 7 | 6 | 2 | 1 | 11 |
| 1985 | 18 | 47 | 12 | 3 | 14 | 5 | 3 | 3 | 14 |
| 1986 | 19 | 44 | 9 | 3 | 10 | 5 | 3 | 2 | 13 |
| 1987 | 31 | 44 | 12 | 3 | 6 | 12 | 3 | 3 | 15 |
| ICE MILK | | | | | | | | | |
| 1960 | 71 | 23 | 75 | 99 | 80 | 77 | 98 | 98 | 71 |
| 1965 | 93 | 44 | 92 | 99 | 93 | 79 | 98 | 99 | 84 |
| 1970 | 72 | 54 | 86 | 92 | 93 | 67 | 98 | 94 | 80 |
| 1975 | 92 | 52 | 87 | 76 | 91 | 76 | 99 | 96 | 81 |
| 1980 | 81 | 55 | 91 | 94 | 91 | 90 | 97 | 99 | 87 |
| 1985 | 81 | 52 | 86 | 96 | 85 | 93 | 95 | 96 | 85 |
| 1986 | 81 | 56 | 90 | 96 | 89 | 93 | 96 | 97 | 86 |
| 1987 | 68 | 55 | 86 | 94 | 93 | 85 | 94 | 96 | 83 |

Prepared by the International Ice Cream Association from data released by the U. S. Department of Agriculture.

## POTPOURRI

- Nearly one-third of American households consume at least one gallon of ice cream every two weeks.
- On the average, ice cream consuming households also eat ice cream at two away-from-home outlets per month.
- Superpremium ice cream is most commonly found in households where there are no children present.
- Male-headed households buy more half gallons, while female headed households are more inclined to purchase pints.
- Children ages 2-17 and adults ages 45 and over eat the most ice cream per person.

### SNACKING

- Snacking is a $26 billion market in the United States.
- Teenagers are the heaviest snackers overall and the heaviest snackers of ice cream and novelties.
- Ninety-four percent of teens reported consuming ice cream and frozen novelties at least once per month.
- Consumers who eat ice cream, eat ice cream and novelties more frequently than any other type of snack.
- Ice cream and frozen novelties are consumed on 31% of snacking occasions.
- Most popular times to consume ice cream and frozen novelties are in the evening, late at night, and while watching TV.
- Packaged ice cream accounts for the largest share of all frozen products consumed as snacks, 30%, followed by ice pops, 9%, and frozen fruit/fruit juice bars, 8%.

Source: IICA Study "Positioning Ice Cream & Novelties for Snacking in the 80's and Beyond."

### NOVELTIES

- The frozen novelty market reached a record $2 billion in sales in 1987.
- Ice pops represent the largest share of the novelty market.
- Between 1986 and 1987, bite-sized ice cream treats experienced the greatest sales growth of all novelty items, followed by ice cream bars, sticks and cones.
- A new group of products, frozen desserts sweetened with aspartame, has now entered the novelty market, aimed at the calorie conscious.

## ICE CREAM QUALITY SEGMENTS

While superpremium and premium ice creams continue to grow in popularity, regular brands still control the marketplace. The market share for each ice cream quality segment in 1987 was estimated to be:

| | $ Sales |
|---|---|
| Superpremium | 8.5% |
| Premium | 30.0% |
| Regular | 51.0% |
| Economy | 10.5% |

Virtually all superpremium ice cream is marketed in round containers, in pint and quart sizes. While a limited amount of premium ice cream is in round packaging, it is mostly sold in rectangular containers with the largest quantity in half gallons.

## TOTAL INDUSTRY SALES

Retail sales of ice cream and related products reached over $9 billion in 1987.

Supermarket sales of packaged ice cream, frozen novelties and ice cream related products are estimated to be $4.8 billion. Foodservice sales of the same products (includes ice cream shops, restaurants, schools, military bases, hospitals, etc.) are expected to total $4.5 billion.

Source: IICA estimates.

## ADVERTISING

It is estimated the industry spent $120 million on advertising in 1987, contrasted with $14 million five years ago.

## FOODSERVICE

In 1988 foodservice sales are projected to reach $213.5 billion, up 7.1% over 1987. Sales of ice cream and frozen custard stands are forecast to increase 7.1% for a total of $1.7 billion.

| | Estimated Sales 1986 ($000) | Projected Sales 1987 ($000) | Projected Sales 1988 ($000) | % Change 1987/1988 |
|---|---|---|---|---|
| Restaurants, Lunchrooms | $ 62,301,434 | $ 66,142,507 | $ 70,574,055 | + 6.7 |
| Limited Menu Restaurants (Fast Food) | 51,184,858 | 55,671,888 | 60,424,713 | + 8.5 |
| Commercial Cafeterias | 3,470,130 | 3,678,338 | 3,913,752 | + 6.4 |
| Social Caterers | 1,390,179 | 1,490,197 | 1,600,472 | + 7.4 |
| Ice Cream & Frozen Custard Stands | 1,477,670 | 1,585,540 | 1,698,113 | + 7.1 |
| TOTAL EATING PLACES | $120,124,271 | $128,568,470 | $138,211,105 | + 7.5 |

Source: National Restaurant Association.

PERFORMANCE OF SELECTED PRODUCTS IN THE SUPERMARKET -- SALES, GROSS PROFITS, MARGINS AND ASSORTMENT/VARIETIES AT WAREHOUSE

1987

| Products | Sales Volume ($ Mil.) | Gross Profit ($ Mil.) | % Margin Average Retail Gross Profits | Assortment/ Varieties at Warehouse |
|---|---|---|---|---|
| Ice Cream | $ 2,317.57 | $ 709.18 | 30.60 | 69 |
| Fluid Milk Products | 5,826.54 | 1,462.52 | 25.10 | 25 |
| Yogurt | 1,147.37 | 312.99 | 27.28 | 113 |
| Cottage Cheese | 681.80 | 180.95 | 26.54 | 31 |
| Canned & Dry Milk | 291.02 | 48.11 | 16.53 | 18 |
| Cheese | 3,528.90 | 856.82 | 24.28 | 275 |
| Butter | 1,216.23 | 349.89 | 28.77 | 13 |
| Margarine | 1,069.94 | 259.38 | 24.24 | 43 |
| Eggs | 1,984.27 | 366.16 | 18.45 | 7 |
| Froz. Juice & Drinks | 1,626.49 | 283.86 | 17.45 | 30 |
| Refrig. Juice & Drinks | 1,719.11 | 324.97 | 18.90 | 18 |
| Carbonated Soft Drinks | 7,793.55 | 2,176.92 | 27.93 | 115 |
| Bakery Foods, Packaged | 7,730.02 | 1,584.66 | 20.50 | 127 |
| Cookies & Crackers | 4,783.31 | 1,149.75 | 24.04 | 112 |
| Desserts & Toppings | 644.66 | 162.64 | 25.23 | 148 |
| Canned Fruit | 1,189.89 | 302.71 | 25.44 | 179 |
| Candy & Gum | 2,698.83 | 879.11 | 32.57 | 604 |
| Snacks | 3,456.64 | 1,010.45 | 29.23 | 55 |

Source: Progressive Grocer, 1988 Supermarket Sales Manual

ESTIMATED WHOLESALE VALUE OF ICE CREAM PRODUCTS

1984-1987

| | 1984 ($000) | 1985 ($000) | 1986 ($000) | 1987 ($000) |
|---|---|---|---|---|
| Ice Cream | $2,764,000 | $2,825,000 | $2,937,000 | $3,003,000 |
| Ice Milk | 641,000 | 653,000 | 692,000 | 752,000 |
| Sherbet | 119,000 | 122,000 | 128,000 | 132,000 |
| Water Ices | 136,000 | 162,000 | 168,000 | 166,000 |

Source: IICA estimates.

## FLAVORS - ICE CREAM

(Hard Frozen)

| MOST POPULAR FLAVORS | | MOST POPULAR CATEGORIES | |
|---|---|---|---|
| 1. Vanilla | 31.02% | 1. Vanilla | 32.23% |
| 2. Chocolate | 8.81 | 2. Candy/Confection | 9.01 |
| 3. Neapolitan | 6.19 | 3. Chocolate | 8.81 |
| 4. Vanilla Fudge | 4.16 | 4. Neapolitan | 6.19 |
| 5. Cookies 'n Cream | 3.89 | 5. Nut | 6.17 |
| 6. Butter Pecan | 3.83 | 6. Variegated | 5.39 |
| 7. Chocolate Chip | 3.60 | 7. Fruit | 5.28 |
| 8. Strawberry | 3.53 | 8. Chocolate & Nuts | 4.64 |
| 9. Rocky Road | 1.31 | 9. Chocolate/Vanilla | 0.45 |
| 10. Tin Roof Sundae | 1.26 | 10. Coffee | 0.41 |
| Cherry | 1.26 | Other | 21.42 |
| 12. French Vanilla | 1.21 | | 100.00% |
| 13. Praline Pecan | 0.91 | | |
| Heavenly Hash | 0.91 | | |
| 15. Chocolate Almond | 0.85 | | |
| Other | 27.26 | | |
| | 100.00% | | |

## PACKAGED ICE CREAM

(Hard Frozen)

| Size | Paper | Plastic | All Containers |
|---|---|---|---|
| Pints | 6.99% | 1.71% | 6.59% |
| Quarts | 2.05 | 7.39 | 2.35 |
| Half Gallons | 68.46 | 21.25 | 64.89 |
| Bulk | 16.73 | 9.78 | 16.20 |
| Other 1/ | 5.77 | 59.87 | 9.97 |
| | 100.00% | 100.00% | 100.00% |

| Size | Round | Rectangular |
|---|---|---|
| Pints | 11.08% | 1.76% |
| Quarts | 4.26 | 0.18 |
| Half Gallons | 47.55 | 85.85 |
| Bulk | 25.99 | 3.95 |
| Other 1/ | 11.23 | 8.26 |
| | 100.00% | 100.00% |

### BREAKDOWN OF PAPER AND PLASTIC CONTAINERS

| | |
|---|---|
| Paper | 92.43% |
| Plastic | 7.57 |
| | 100.00% |

1/ Includes some gallons and larger units.

Source: Survey conducted by International Ice Cream Association, based on 1984 volume.

# HIGHLIGHTS—CANADA

## PRODUCTION - 1987

In 1987 all products with the exception of sherbet experienced a decline in production compared with 1986. In 1986, all products had reported a gain in production and record volumes were established for ice cream, freezer-made milkshake, ice milk and water ices.

For the year 1987 ice cream production totaled 309.4 million liters, down 3%. Freezer-made milkshake, down 5%, amounted to 29.4 million liters. Ice milk with a reported production of 15.6 million liters, declined 11%, while water ices with a volume of 14.4 million liters was down 17%. Sherbet production rose 28% and totaled 3.3 million liters. The production of all ice cream products amounted to 372 million liters, down 4%.

Manitoba, with the highest per capita of ice cream of 15.82 liters, reported an increase in production of ice cream of 1%. Other provinces reporting an increase in the production of ice cream included Nova Scotia, up 5.05% and British Columbia, up 0.35%. Provinces reporting a decline in ice cream production included Alberta, down 8%, Ontario declined 4.45% and Quebec which had experienced the largest gain of any province in 1986, was down 1%.

Ice cream accounts for 80% of the total of all ice cream and related products produced.

July was the largest producing month of ice cream with 11.29% of the total production while December ranked the lowest with 6.25%.

| | Production 1987 (Liters) 1/ | % Change from 1986 | Per Capita 1987 (Liters) | % Change from 1986 |
|---|---|---|---|---|
| Ice Cream - Hard | 291,761,000 | - 2.87 | 11.37 | - 3.92 |
| Ice Cream - Soft | 17,613,000 | - 0.64 | 0.69 | - 1.72 |
| Total Ice Cream | 309,374,000 | - 2.75 | 12.06 | - 3.80 |
| Freezer-made Milkshake 2/ | 29,386,000 | - 5.44 | 1.14 | - 6.47 |
| Ice Milk | 15,561,000 | -10.73 | 0.61 | -11.70 |
| Water Ices | 14,363,000 | -16.90 | 0.56 | -17.80 |
| Sherbet | 3,306,000 | +28.14 | 0.13 | +26.76 |
| TOTAL ALL PRODUCTS | 371,990,000 | - 3.75 | 14.50 | - 4.80 |

1/ One U. S. quart equivalent to .946 liter.
2/ Freezer-made milkshake derived by applying 40% overrun to milkshake mix.

Prepared by the International Ice Cream Association from data released by Statistics Canada.

HARD AND SOFT PRODUCTION OF ICE CREAM - CANADA

BY PROVINCES - 1985-1986-1987

| Province | Year | Production | | | | |
|---|---|---|---|---|---|---|
| | | Hard | Soft | Total | Hard | Soft |
| | | (Thousand Liters) 1/ | | | (Percent) | |
| Alberta | 1985 | 34,813 | 3,206 | 38,019 | 92 | 8 |
| | 1986 | 36,243 | 3,397 | 39,640 | 91 | 9 |
| | 1987 | 33,208 | 3,083 | 36,291 | 92 | 8 |
| British Columbia | 1985 | 27,769 | 3,904 | 31,673 | 88 | 12 |
| | 1986 | 28,434 | 3,839 | 32,273 | 88 | 12 |
| | 1987 | 28,559 | 3,828 | 32,387 | 88 | 12 |
| Manitoba | 1985 | 16,707 | 1,849 | 18,556 | 90 | 10 |
| | 1986 | 15,267 | 1,705 | 16,962 | 90 | 10 |
| | 1987 | 15,412 | 1,660 | 17,072 | 90 | 10 |
| Nova Scotia | 1985 | 9,969 | 946 | 10,915 | 91 | 9 |
| | 1986 | 10,127 | 954 | 11,081 | 91 | 9 |
| | 1987 | 10,643 | 998 | 11,641 | 91 | 9 |
| Ontario | 1985 | 119,996 | 2,126 | 122,122 | 98 | 2 |
| | 1986 | 124,583 | 2,238 | 126,821 | 98 | 2 |
| | 1987 | 119,098 | 2,079 | 121,177 | 98 | 2 |
| Quebec | 1985 | 65,959 | 3,617 | 69,576 | 95 | 5 |
| | 1986 | 68,511 | 3,932 | 72,443 | 95 | 5 |
| | 1987 | 67,136 | 4,588 | 71,724 | 94 | 6 |
| CANADA 2/ | 1985 | 292,667 | 17,540 | 310,207 | 94 | 6 |
| | 1986 | 300,394 | 17,727 | 318,121 | 94 | 6 |
| | 1987 | 291,761 | 17,613 | 309,374 | 94 | 6 |

1/ One U. S. quart equivalent to .946 liter.

2/ Includes production in New Brunswick, Newfoundland, Prince Edward Island and Saskatchewan which could not be reported separately.

Prepared by the International Ice Cream Association from data released by Statistics Canada.

# International Statistics

This section includes data for 56 countries, including United States and Canada. In some countries, production is reported only by the large manufacturers and no estimates are available for the output by small establishments. In such instances, the computed production and per capita are incomplete but the reported figures indicate trends.

| Country and Product | Annual Production: In Reported Units | Annual Production: Converted to U. S. Gallons | Per Capita Production: In Reported Units | Per Capita Production: Converted to U. S. Pints |
|---|---|---|---|---|
| UNITED STATES - 1987 | | | | |
| Ice Cream | | 931,398,000 | | 30.61 |
| Ice Milk | | 330,312,000 | | 10.86 |
| Sherbet | | 49,709,000 | | 1.63 |
| Water Ices | | 48,613,000 | | 1.60 |
| Mellorine | | 10,110,000 | | 0.33 |
| Other Frozen Dairy Products | | 38,725,000 | | 1.27 |
| Total | | 1,408,867,000 | | 46.30 |
| ARGENTINA - 1986 | (Liters) | | (Liters) | |
| Ice Cream | 41,020,000 | 10,837,000 | 1.32 | 2.78 |
| Ice Milk | 10,130,000 | 2,676,000 | 0.32 | 0.68 |
| Sherbet & Water Ices | 4,450,000 | 1,176,000 | 0.14 | 0.30 |
| Others | 1,220,000 | 322,000 | 0.04 | 0.08 |
| Total | 56,820,000 | 15,011,000 | 1.82 | 3.84 |
| AUSTRALIA - 1987 | (Liters) | | (Liters) | |
| Ice Cream | 207,758,000 | 54,890,000 | 12.79 | 27.00 |
| Milk Ice | 49,767,000 | 13,148,000 | 3.06 | 6.47 |
| Water Ices | 13,875,000 | 3,666,000 | 0.85 | 1.80 |
| Other 1/ | 18,085,000 | 4,778,000 | 1.11 | 2.35 |
| Total | 289,485,000 | 76,482,000 | 17.81 | 37.62 |
| AUSTRIA - 1987 | (Liters) | | (Liters) | |
| Ice Cream | 36,000,000 | 9,511,000 | 4.75 | 10.04 |
| Sherbet & Water Ices | 11,600,000 | 3,065,000 | 1.53 | 3.23 |
| Total | 47,600,000 | 12,576,000 | 6.28 | 13.27 |
| BANGLADESH - 1983 | (Metric Tons) | | (Pounds) | |
| Ice Cream | 550 | 269,500 | 0.01 | 0.02 |
| Sherbet & Water Ices | 7,250 | 2,664,375 | 0.17 | 0.22 |
| Total | 7,800 | 2,933,875 | 0.18 | 0.24 |
| BELGIUM - 1987 | (Liters) | | (Liters) | |
| Ice Cream | 85,900,000 | 22,695,000 | 8.71 | 18.39 |
| BRAZIL - 1983 | (Liters) | | (Liters) | |
| Ice Cream | 58,000,000 | 15,324,000 | 0.44 | 0.93 |
| Ice Milk | 21,000,000 | 5,548,000 | 0.16 | 0.34 |
| Sherbet & Water Ices | 14,000,000 | 3,699,000 | 0.11 | 0.23 |
| Total | 93,000,000 | 24,571,000 | 0.71 | 1.50 |
| CANADA - 1987 | (Liters) | | (Liters) | |
| Ice Cream | 309,374,000 | 81,737,000 | 12.06 | 25.46 |
| Freezer-made Milkshake 2/ | 29,386,000 | 7,764,000 | 1.14 | 2.42 |
| Ice Milk | 15,561,000 | 4,112,000 | 0.61 | 1.28 |
| Water Ices | 14,363,000 | 3,795,000 | 0.56 | 1.18 |
| Sherbet | 3,306,000 | 873,000 | 0.13 | 0.27 |
| Total | 371,990,000 | 98,281,000 | 14.50 | 30.61 |
| CHILE - 1986 | (Liters) | | (Liters) | |
| Ice Cream & Related Products | 29,000,000 | 7,662,000 | 2.37 | 4.99 |

PRODUCTION OF ICE CREAM AND RELATED PRODUCTS - CANADA

1971-1987

| Year | Ice Cream | | | Freezer-made Milkshake 1/ | Ice Milk | Sherbet | Water Ices | Total All Products |
|---|---|---|---|---|---|---|---|---|
| | Hard | Soft | Total | | | | | |
| | (Thousand Liters) 2/ | | | | | | | |
| 1971 | 254,591 | 17,884 | 272,439 | 10,826 | 7,901 | 3,519 | 12,847 | 307,532 |
| 1972 | 258,851 | 18,066 | 276,917 | 9,369 | 13,674 | 3,701 | 13,588 | 317,249 |
| 1973 | 256,954 | 18,221 | 275,175 | 10,304 | 13,879 | 3,914 | 15,402 | 318,674 |
| 1974 | 259,164 | 18,580 | 277,744 | 12,003 | 11,429 | 3,841 | 11,583 | 316,600 |
| 1975 | 266,515 | 20,717 | 287,232 | 11,820 | 12,675 | 3,337 | 12,602 | 327,666 |
| 1976 | 258,850 | 20,721 | 279,571 | 13,219 | 14,084 | 3,578 | 11,665 | 322,117 |
| 1977 | 269,637 | 21,536 | 291,173 | 15,364 | 15,219 | 3,122 | 11,398 | 336,276 |
| 1978 | 266,150 | 21,465 | 287,615 | 14,718 | 15,158 | 3,528 | 11,786 | 332,805 |
| 1979 | 289,748 | 17,921 | 307,669 | 24,112 | 12,130 | 3,664 | 12,744 | 360,319 |
| 1980 | 295,215 | 16,718 | 311,933 | 26,803 | 12,446 | 3,170 | 12,924 | 367,276 |
| 1981 | 292,421 | 19,549 | 311,970 | 28,094 | 13,429 | 2,900 | 13,074 | 369,467 |
| 1982 | 284,898 | 18,541 | 303,439 | 27,391 | 13,345 | 2,486 | 14,249 | 360,910 |
| 1983 | 293,784 | 17,805 | 311,589 | 28,164 | 13,435 | 3,194 | 16,266 | 372,648 |
| 1984 | 283,996 | 17,209 | 301,205 | 26,244 | 16,929 | 2,900 | 19,496 | 366,774 |
| 1985 | 292,667 | 17,540 | 310,207 | 28,869 | 16,481 | 2,556 | 15,886 | 373,999 |
| 1986 | 300,394 | 17,727 | 318,121 | 31,078 | 17,432 | 2,580 | 17,285 | 386,496 |
| 1987 | 291,761 | 17,613 | 309,374 | 29,386 | 15,561 | 3,306 | 14,363 | 371,990 |

1/ Freezer-made milkshake derived by applying 40% overrun in milkshake mix.

2/ One U. S. quart equivalent to .946 liter.

Prepared by the International Ice Cream Association from data released by Statistics Canada.

MONTHLY PRODUCTION OF ICE CREAM AND RELATED PRODUCTS - CANADA

1987

| Month | Ice Cream | | | Freezer-made Milkshake 1/ | Ice Milk | Sherbet | Water Ices | Total All Products |
|---|---|---|---|---|---|---|---|---|
| | Hard | Soft | Total | | | | | |
| | (Thousand Liters) 2/ | | | | | | | |
| January | 19,282 | 651 | 19,933 | 1,592 | 799 | 275 | 531 | 23,130 |
| February | 21,045 | 520 | 21,565 | 1,616 | 877 | 251 | 843 | 25,152 |
| March | 24,990 | 807 | 25,797 | 2,027 | 1,247 | 289 | 1,222 | 30,582 |
| April | 23,625 | 1,658 | 25,283 | 2,930 | 1,596 | 302 | 1,635 | 31,746 |
| May | 26,615 | 2,186 | 28,801 | 3,295 | 1,948 | 243 | 2,103 | 36,390 |
| June | 31,604 | 3,315 | 34,919 | 3,394 | 2,379 | 368 | 2,968 | 44,028 |
| July | 34,462 | 3,213 | 37,675 | 3,261 | 1,956 | 335 | 2,900 | 46,127 |
| August | 28,740 | 2,122 | 30,862 | 2,933 | 1,520 | 283 | 1,445 | 37,043 |
| September | 22,016 | 1,271 | 23,287 | 2,338 | 1,078 | 329 | 367 | 27,399 |
| October | 20,819 | 957 | 21,776 | 1,996 | 861 | 295 | 155 | 25,083 |
| November | 19,645 | 497 | 20,142 | 1,812 | 676 | 202 | 128 | 22,960 |
| December | 18,918 | 416 | 19,334 | 2,192 | 624 | 134 | 66 | 22,350 |
| YEAR | 291,761 | 17,613 | 309,374 | 29,386 | 15,561 | 3,306 | 14,363 | 371,990 |

1/ Freezer-made milkshake derived by applying 40% overrun to milkshake mix.

2/ One U. S. quart equivalent to .946 liter.

Prepared by the International Ice Cream Association from data released by Statistics Canada.

PER CAPITA PRODUCTION OF ICE CREAM - CANADA

BY PROVINCES - 1970-1987

| Province | 1970 | 1975 | 1980 | 1983 | 1984 | 1985 | 1986 | 1987 |
|---|---|---|---|---|---|---|---|---|
| | | | | (Liters) 1/ | | | | |
| Alberta | 16.06 | 17.12 | 14.59 | 14.74 | 15.50 | 16.19 | 16.68 | 15.24 |
| British Columbia | 13.26 | 13.71 | 14.44 | 12.49 | 10.71 | 11.02 | 11.16 | 11.05 |
| Manitoba | 15.41 | 18.65 | 20.43 | 19.98 | 18.27 | 17.46 | 15.84 | 15.82 |
| Nova Scotia | 14.97 | 15.60 | 13.96 | 13.50 | 12.99 | 12.55 | 12.68 | 13.24 |
| Ontario | 12.80 | 11.22 | 13.06 | 13.60 | 12.86 | 13.54 | 13.90 | 13.05 |
| Quebec | 12.17 | 12.46 | 12.35 | 10.82 | 10.65 | 10.68 | 11.07 | 10.87 |
| CANADA 2/ | 13.13 | 13.06 | 13.38 | 12.56 | 12.05 | 12.32 | 12.54 | 12.06 |

1/ One U. S. quart equivalent to .946 liter.

2/ Includes production in New Brunswick, Newfoundland, Prince Edward Island and Saskatchewan which could not be reported separately.

Prepared by the International Ice Cream Association from data released by Statistics Canada.

| Country and Product | ANNUAL PRODUCTION In Reported Units | ANNUAL PRODUCTION Converted to U. S. Gallons | PER CAPITA PRODUCTION In Reported Units | PER CAPITA PRODUCTION Converted to U. S. Pints |
|---|---|---|---|---|
| COLUMBIA - 1967 | (Metric Tons) | | (Kilograms) | |
| Ice Cream | 12,300 | 6,027,000 | 0.45 | 1.76 |
| Sherbet | 1,030 | 378,500 | 0.04 | 0.11 |
| Water Ices | 825 | 303,200 | 0.03 | 0.09 |
| Total | 14,155 | 6,708,700 | 0.52 | 1.96 |
| COSTA RICA - 1961 | (Liters) | | (Liters) | |
| Ice Cream | 8,072,000 | 2,132,600 | 3.53 | 7.46 |
| Ice Milk | 1,347,000 | 355,800 | 0.59 | 1.25 |
| Sherbet & Water Ices | 394,000 | 104,100 | 0.17 | 0.36 |
| Total | 9,813,000 | 2,592,500 | 4.29 | 9.07 |
| DENMARK - 1967 | (Liters) | | (Liters) | |
| Ice Cream | 37,500,000 | 9,907,500 | 7.15 | 15.10 |
| Water Ices | 2,300,000 | 607,600 | 0.45 | 0.95 |
| Total | 39,800,000 | 10,515,100 | 7.60 | 16.05 |
| DOMINICAN REPUBLIC - 1962 | (Kilograms) | | (Kilograms) | |
| Ice Cream | 5,071,000 | 1,035,000 | 0.88 | 3.45 |
| EGYPT - 1963 | (Metric Tons) | | (Kilograms) | |
| Ice Cream | 20,000 | 9,800,000 | 0.44 | 1.71 |
| Ice Milk | 3,000 | 1,470,000 | 0.07 | 0.26 |
| Sherbet & Water Ices | 2,000 | 735,000 | 0.04 | 0.13 |
| Total | 25,000 | 12,005,000 | 0.55 | 2.10 |
| FINLAND - 1967 | (Metric Tons) | | (Kilograms) | |
| Ice Cream | 53,000 | 25,970,000 | 10.74 | 42.10 |
| FRANCE - 1966 | (Liters) | | (Liters) | |
| Ice Cream - Industrial | 209,158,000 | 55,260,000 | 3.78 | 7.97 |
| WEST GERMANY - 1967 | (Liters) | | (Liters) | |
| Ice Cream - Industrial | 343,600,000 | 90,779,000 | 5.63 | 11.90 |
| Small Establishments | 95,000,000 | 25,099,000 | 1.56 | 3.29 |
| Total | 438,600,000 | 115,878,000 | 7.19 | 15.19 |
| GREECE - 1965 | (Metric Tons) | | (Kilograms) | |
| Ice Cream - Industrial | 25,000 | 12,250,000 | 2.55 | 10.00 |
| Ice Cream - Confectionary | 12,000 | 5,880,000 | 1.22 | 4.80 |
| Total | 37,000 | 18,130,000 | 3.77 | 14.80 |
| HONG KONG - 1967 | | | | |
| Ice Cream | | 4,500,000 | | 8.04 |
| Sherbet | | 100,000 | | 0.17 |
| Water Ices | | 950,000 | | 1.70 |
| Total | | 5,550,000 | | 9.91 |
| INDIA - 1960 | (Metric Tons) | | (Kilograms) | |
| Ice Cream | 232,000 | 113,680,000 | 0.34 | 1.33 |
| INDONESIA - 1965 | (Liters) | | (Liters) | |
| Ice Cream | 3,617,000 | 955,611 | 0.02 | 0.04 |
| IRELAND - 1965 | (Liters) | | (Liters) | |
| Ice Cream | 27,000,000 | 7,133,400 | 7.40 | 15.62 |

| Country and Product | ANNUAL PRODUCTION In Reported Units | ANNUAL PRODUCTION Converted to U. S. Gallons | PER CAPITA PRODUCTION In Reported Units | PER CAPITA PRODUCTION Converted to U. S. Pints |
|---|---|---|---|---|
| ITALY - 1987 | (Metric Tons) | | (Kilograms) | |
| Ice Cream - Industrial | 191,100 | 93,639,000 | 3.33 | 13.06 |
| Small Establishments | 100,000 | 49,000,000 | 1.74 | 6.82 |
| Total | 291,100 | 142,639,000 | 5.07 | 19.88 |
| IVORY COAST - 1986 | (Metric Tons) | | (Kilograms) | |
| Ice Cream & Related Products | 7,400 | 362,600 | 0.70 | 2.76 |
| JAPAN - 1985 | (Liters) | | (Liters) | |
| Ice Cream | 195,000,000 | 51,519,000 | 1.62 | 3.41 |
| Ice Milk | 60,000,000 | 15,852,000 | 0.50 | 1.05 |
| Lacto Ices | 326,000,000 | 86,129,000 | 2.70 | 5.70 |
| Water Ices | 319,000,000 | 84,280,000 | 2.64 | 5.58 |
| Total | 900,000,000 | 237,780,000 | 7.46 | 15.74 |
| JORDAN - 1983 | (Metric Tons) | | (Pounds) | |
| Ice Cream & Related Products | 1,600 | 784,000 | 1.36 | 2.42 |
| KENYA - 1987 | Liters) | | (Liters) | |
| Ice Cream | 800,000 | 211,360 | 0.04 | 0.08 |
| Milk Ices | 85,000 | 22,457 | - | 0.01 |
| Soft Serve | 250,000 | 66,050 | 0.01 | 0.02 |
| Water Ices | 180,000 | 47,556 | 0.01 | 0.02 |
| Total | 1,315,000 | 347,423 | 0.06 | 0.13 |
| KOREA - 1987 | (Metric Tons) | | (Kilograms) | |
| Ice Cream | 21,617 | 10,592,000 | 0.98 | 3.85 |
| LEBANON - 1983 | (Metric Tons) | | (Kilograms) | |
| Dairy Ice Cream | 1,500 | 735,000 | 0.50 | 1.96 |
| Ice Milk | 200 | 98,000 | 0.07 | 0.27 |
| Water Ices | 500 | 184,000 | 0.17 | 0.50 |
| Sherbet | 1,200 | 441,000 | 0.40 | 1.18 |
| Arabic Ice Cream | 300 | 147,000 | 0.10 | 0.39 |
| Total | 3,700 | 1,605,000 | 1.24 | 4.30 |
| LUXEMBOURG - 1986 | (Liters) | | (Liters) | |
| Ice Cream | 2,500,000 | 660,500 | 6.85 | 14.46 |
| MALAYSIA - 1982 | (Liters) | | (Liters) | |
| Ice Cream | 4,858,800 | 1,283,700 | 0.34 | 0.73 |
| Bars & Popsicles | 3,900,800 | 1,030,600 | 0.28 | 0.58 |
| Total | 8,759,600 | 2,314,300 | 0.62 | 1.31 |
| MEXICO - 1985 | (Liters) | | (Liters) | |
| Ice Cream | 80,000,000 | 21,136,000 | 1.00 | 2.12 |
| Sherbet & Water Ices | 10,000,000 | 2,642,000 | 0.13 | 0.27 |
| Total | 90,000,000 | 23,778,000 | 1.13 | 2.39 |
| MOROCCO - 1984 | (Liters) | | (Liters) | |
| Industrial Ice Cream | 875,000 | 231,000 | 0.04 | 0.08 |
| Other Related Products | 2,400,000 | 634,000 | 0.10 | 0.21 |
| Total | 3,275,000 | 865,000 | 0.14 | 0.29 |
| NETHERLAND - 1981 | (Liters) | | (Liters) | |
| Ice Cream | 15,294,000 | 4,041,000 | 1.06 | 2.24 |
| Water Ices | 6,555,000 | 1,732,000 | 0.45 | 0.95 |
| Other | 21,849,000 | 5,772,000 | 1.52 | 3.21 |
| Total Industrial | 43,698,000 | 11,545,000 | 3.03 | 6.40 |
| Small Establishments | 34,000,000 | 8,983,000 | 2.36 | 4.98 |
| Total | 77,698,000 | 20,528,000 | 5.39 | 11.38 |

| Country and Product | ANNUAL PRODUCTION In Reported Units | ANNUAL PRODUCTION Converted to U. S. Gallons | PER CAPITA PRODUCTION In Reported Units | PER CAPITA PRODUCTION Converted to U. S. Pints |
|---|---|---|---|---|
| NEW ZEALAND - 1987 | (Liters) | | (Liters) | |
| Ice Cream | 46,567,000 | 12,303,000 | 14.05 | 29.67 |
| Soft Serve | 4,854,000 | 1,282,000 | 1.47 | 3.09 |
| Total | 51,421,000 | 13,585,000 | 15.52 | 32.76 |
| NIGERIA - 1980 | (Liters) | | (Liters) | |
| Ice Cream | 2,200,000 | 581,000 | 0.03 | 0.07 |
| NORWAY - 1986 | (Liters) | | (Liters) | |
| Ice Cream | 43,172,000 | 11,406,000 | 10.37 | 21.89 |
| Soft Ice Cream | 2,692,000 | 711,000 | 0.65 | 1.36 |
| Sherbet | 2,022,000 | 534,000 | 0.49 | 1.03 |
| Total | 47,886,000 | 12,651,000 | 11.51 | 24.28 |
| PAKISTAN - 1986 | (Metric Tons) | | (Kilograms) | |
| Ice Cream | 26,500 | 12,985,000 | 0.27 | 1.06 |
| Ice Milk | 8,700 | 4,263,000 | 0.09 | 0.35 |
| Sherbet | 12,800 | 4,704,000 | 0.13 | 0.38 |
| Total | 48,000 | 21,952,000 | 0.49 | 1.79 |
| PERU - 1987 | (Metric Tons) | | (Kilograms) | |
| Ice Cream | 8,155 | 3,996,000 | 0.39 | 1.53 |
| Water Ices | 423 | 155,500 | 0.02 | 0.06 |
| Sherbet | 104 | 38,000 | - | 0.01 |
| Total | 8,682 | 4,189,500 | 0.41 | 1.60 |
| POLAND - 1986 | (Metric Tons) | | (Kilograms) | |
| Ice Cream - Industrial | 19,200 | 10,437,000 | 0.51 | 2.00 |
| Ice Cream - Confectionary | 12,800 | 6,272,000 | 0.34 | 1.34 |
| Total | 32,000 | 16,709,000 | 0.85 | 3.34 |
| PORTUGAL - 1987 | (Kilograms) | | (Kilograms) | |
| Packed Ice Cream & Sherbet | 10,505,200 | 5,147,500 | 1.02 | 4.00 |
| Other Frozen Desserts | 142,500 | 69,800 | 0.01 | 0.05 |
| Total | 10,647,700 | 5,217,300 | 1.03 | 4.05 |
| SAUDI ARABIA - 1987 | (Liters) | | (Liters) | |
| Ice Cream | 24,500,000 | 6,473,000 | 1.65 | 3.50 |
| SINGAPORE - 1985 | (Liters) | | (Liters) | |
| Ice Cream | 8,269,000 | 2,184,670, | 3.24 | 6.83 |
| SOUTH AFRICA - 1987 | (Liters) | | (Liters) | |
| Ice Cream | 18,012,000 | 4,758,700 | 0.53 | 1.12 |
| Sherbet | 26,062,000 | 6,885,600 | 0.77 | 1.63 |
| Soft Serve | 4,654,000 | 1,229,500 | 0.14 | 0.30 |
| Water Ices | 3,591,000 | 948,700 | 0.11 | 0.23 |
| Milk Ices | 4,523,000 | 1,195,000 | 0.13 | 0.27 |
| Total | 56,842,000 | 15,017,500 | 1.68 | 3.55 |
| SPAIN - 1986 | (Liters) | | (Liters) | |
| Ice Cream | 102,440,000 | 27,064,600 | 2.65 | 5.60 |
| Water Ices | 33,160,000 | 8,760,800 | 0.85 | 1.79 |
| Total | 135,600,000 | 35,825,400 | 3.50 | 7.39 |
| SWEDEN - 1987 | (Liters) | | (Liters) | |
| Ice Cream | 101,960,000 | 26,938,000 | 12.16 | 25.68 |
| Water Ices | 5,090,000 | 1,345,000 | 0.61 | 1.28 |
| Soft Ice Cream | 6,710,000 | 1,773,000 | 0.80 | 1.69 |
| Total | 113,760,000 | 30,056,000 | 13.57 | 28.65 |
| SWITZERLAND - 1987 | (Liters) | | (Liters) | |
| Ice Cream & Related Products | 48,200,000 | 12,734,000 | 7.33 | 15.48 |

| Country and Product | ANNUAL PRODUCTION In Reported Units | ANNUAL PRODUCTION Converted to U. S. Gallons | PER CAPITA PRODUCTION In Reported Units | PER CAPITA PRODUCTION Converted to U. S. Pints |
|---|---|---|---|---|
| TAIWAN - 1987 | (Metric Tons) | | (Kilograms) | |
| Ice Cream | 12,387 | 6,070,000 | 0.62 | 2.46 |
| Novelties | 1,980 | 970,000 | 0.10 | 0.39 |
| Total | 14,367 | 7,040,000 | 0.72 | 2.85 |
| TUNISIA - 1985 | (Liters) | | (Liters) | |
| Ice Cream | 1,555,000 | 410,831 | 0.71 | 0.45 |
| TURKEY - 1986 | (Liters) | | (Liters) | |
| Ice Cream & Related Products | 46,400,000 | 17,562,000 | 0.90 | 1.89 |
| UNITED ARAB EMIRATES - 1987 | (Liters) | | (Liters) | |
| Ice Cream | 5,864,000 | 15,493,000 | 3.18 | 6.71 |
| Ice Milk | 1,340,000 | 3,540,000 | 0.72 | 1.53 |
| Water Ices | 1,252,000 | 3,308,000 | 0.67 | 1.43 |
| Other | 49,000 | 129,000 | 0.02 | 0.06 |
| Total | 8,505,000 | 22,470,000 | 4.59 | 9.73 |
| UNITED KINGDOM - 1985 | (Liters) | | (Liters) | |
| Bulk | 119,271,000 | 31,511,000 | 2.11 | 4.45 |
| Soft Ice Cream Mix 3/ | 6,979,000 | 1,843,000 | 0.12 | 0.25 |
| Home Packs | 89,174,000 | 23,559,000 | 1.58 | 3.33 |
| Water Ices | 20,397,000 | 5,389,000 | 0.36 | 0.76 |
| Other Stick Confections | 10,366,000 | 2,739,000 | 0.18 | 0.38 |
| All Other | 50,899,000 | 13,447,000 | 0.90 | 1.90 |
| Total | 297,086,000 | 78,488,000 | 5.25 | 11.07 |
| URUGUAY - 1986 | (Liters) | | (Liters) | |
| Ice Cream & Related Products | 3,500,000 | 924,700 | 1.19 | 2.51 |
| USSR - 1982 | (Metric Tons | | (Kilograms) | |
| Ice Cream | 158,500 | 77,665,000 | 0.59 | 2.30 |
| VENEZUELA - 1987 | (Liters) | | (Liters) | |
| Ice Cream | 4,500,000 | 11,889,000 | 0.25 | 0.52 |
| Ice Milk | 15,000,000 | 39,630,000 | 0.82 | 1.73 |
| Sherbet & Water Ices | 10,000,000 | 26,420,000 | 0.55 | 1.15 |
| Total | 29,500,000 | 77,939,000 | 1.62 | 3.40 |
| YUGOSLAVIA - 1981 | (Metric Tons) | | (Kilograms) | |
| Ice Cream - Industrial | 19,200 | 9,408,000 | 0.84 | 3.30 |
| Small Establishments | 3,500 | 1,715,000 | 0.15 | 0.60 |
| Total | 22,700 | 11,123,000 | 0.99 | 3.90 |

1/ Includes aerated milk-based confections and milk-based mixes for soft serves and thick shakes.
2/ Freezer-made milkshake derived by applying 40% overrun in milkshake base.
3/ Converted into ready-made soft ice cream.

CONVERSION FACTORS:

1 Liter = .2642 U. S. Gallons
= 2.1114 U. S. Pints

1 U. S. Gallon of Ice Cream or Ice Milk = 4.5 Pounds
1 U. S. Gallon of Sherbet or Water Ices = 6.0 Pounds

1 Kilogram = 2.205 Pounds
= .4900 U. S. Gallons of Ice Cream or Ice Milk
= .3675 U. S. Gallons of Sherbet or Water Ices
= 3.920 U. S. Pints of Ice Cream or Ice Milk
= 2.940 U. S. Pints of Sherbet or Water ices

1 Metric Ton (1,000 Kilograms) = 2,205 Pounds
= 490.0 U. S. Gallons of Ice Cream or Ice Milk
= 367.5 U. S. Gallons of Sherbet or Water Ices

Prepared by the International Ice Cream Association from data supplied by Agriculture Attaches of the U. S. Department of Agriculture, or from government or trade statistics.

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